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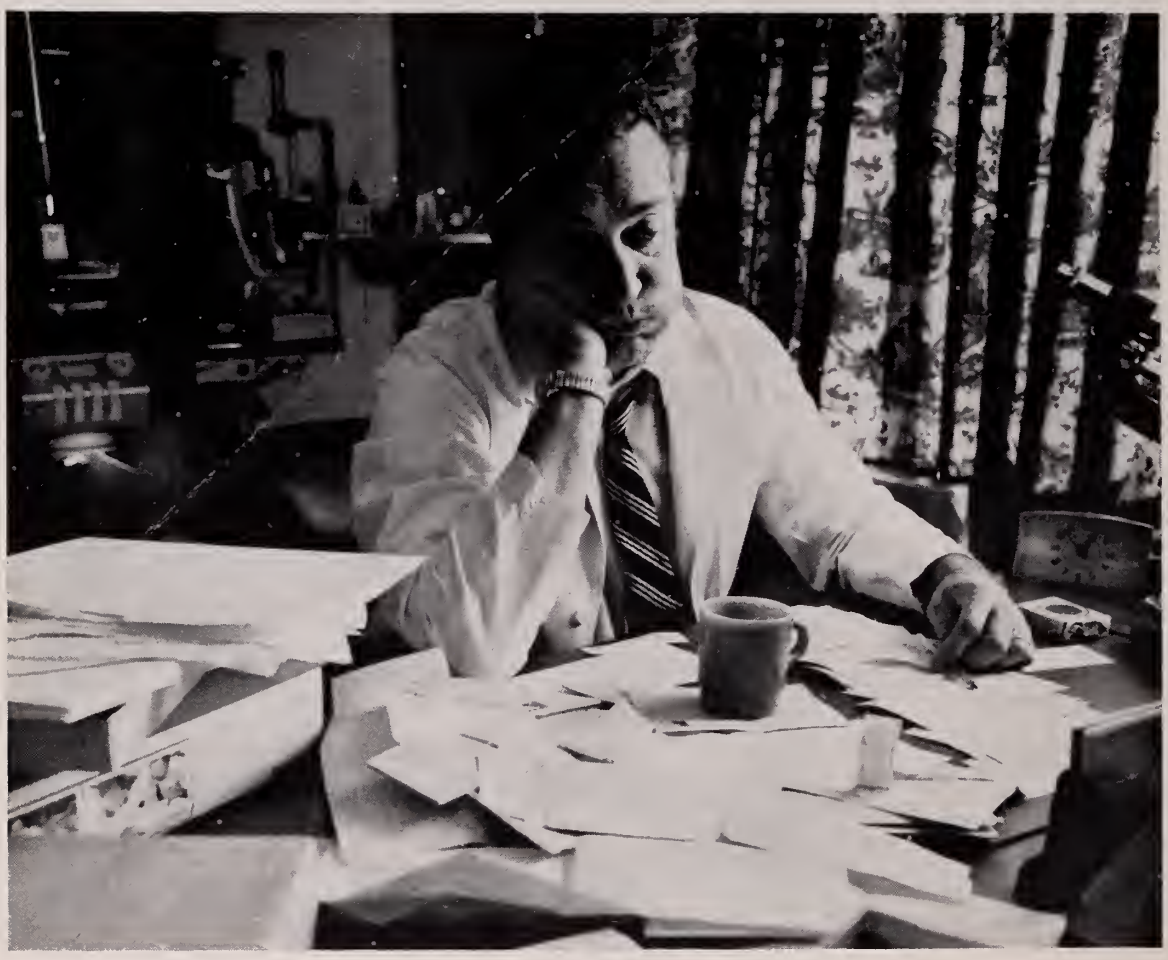
Florida Medical ASSOCIATION

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JANUARY, 1969 • VOLUME 56 • NUMBER 1





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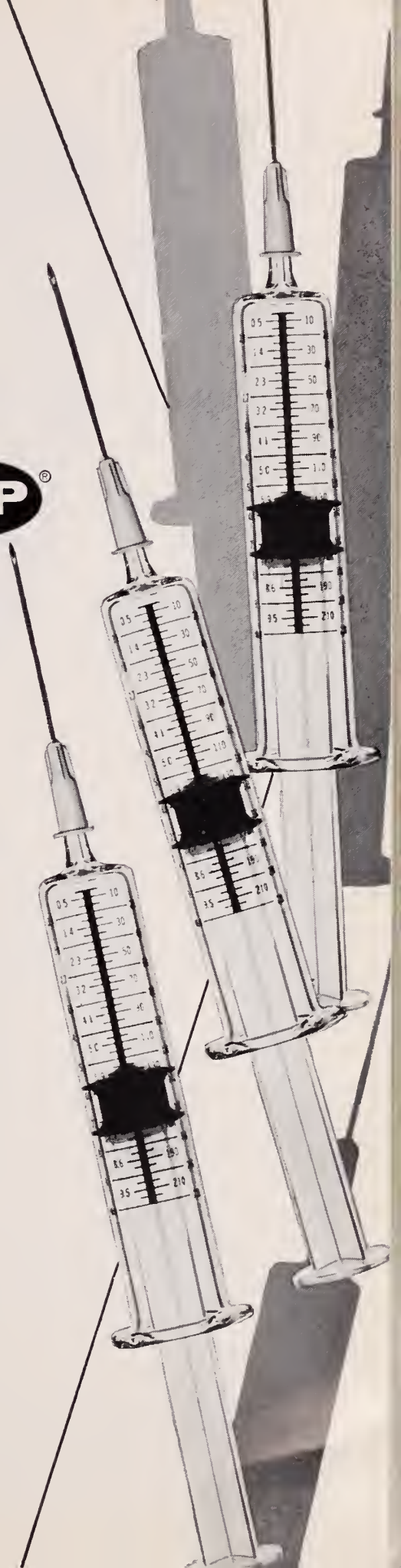
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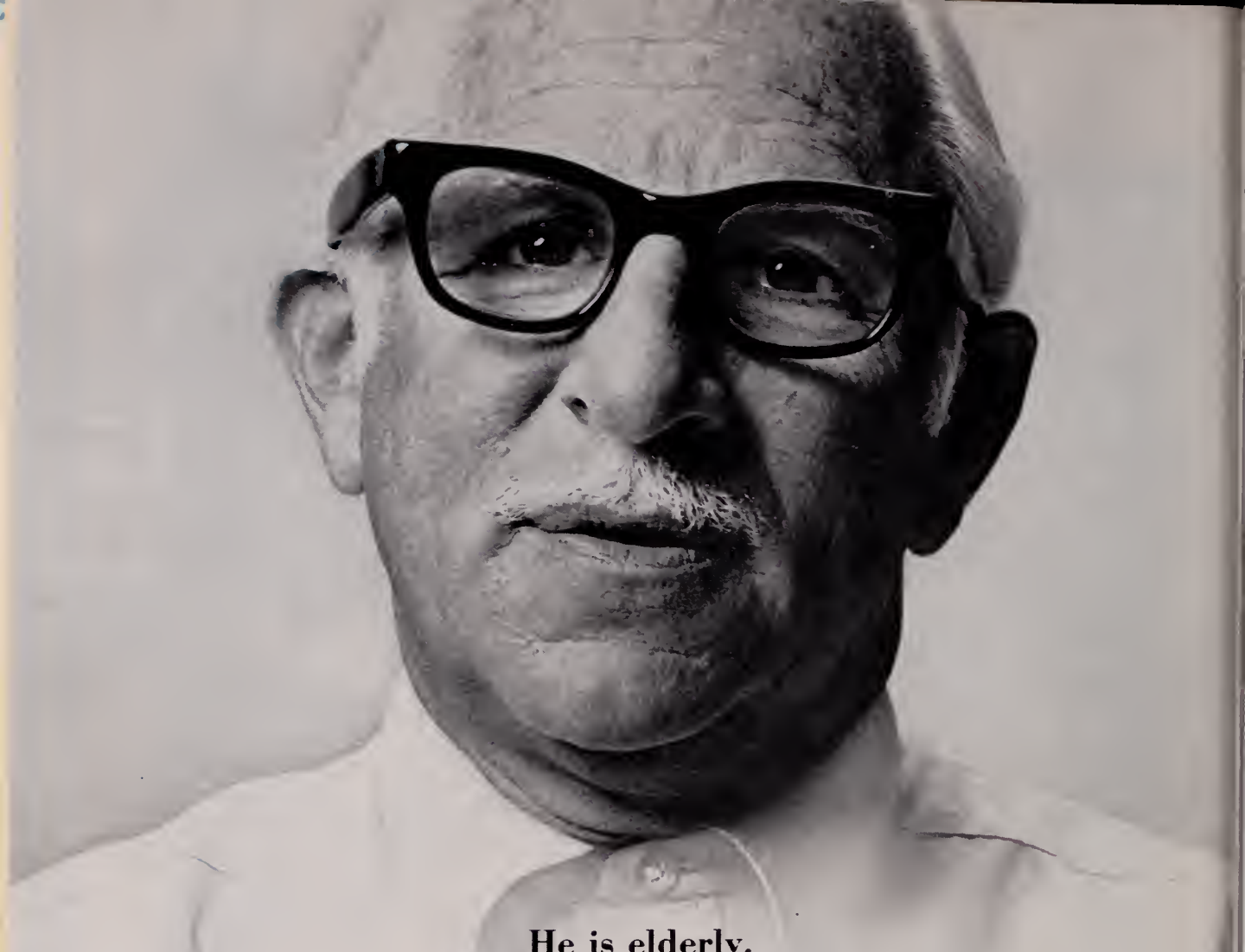
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Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should l given 1 hour before or 2 hours after meals, since absorption is impaire by the concomitant administration of high calcium content drugs, foo and some dairy products. Treatment of streptococcal infections shou continue for 10 days, even though symptoms have subsided.

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Summation:
In addition to its primary indications for duodenal and gastric ulcer, Robinul Forte (glycopyrrolate) is indicated for other G-I conditions that may benefit from anticholinergic therapy. Robinul-PH Forte (glycopyrrolate 2 mg. with phenobarbital) is indicated when these situations are complicated by mild anxiety and tension.

Contraindications: Glaucoma, urinary bladder neck obstruction, pyloric obstruction, stenosis with significant gastric retention, prostatic hypertrophy, duodenal obstruction, cardiospasm (megaesophagus), and achalasia of the esophagus, and in the case of Robinul-PH Forte, sensitivity to phenobarbital.

Precautions: Administer with caution in the presence of incipient glaucoma.

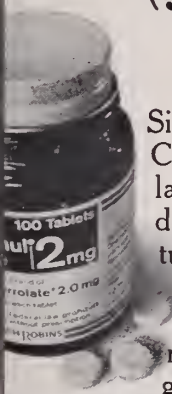
Adverse Reactions: Dryness of the mouth, blurred vision, urinary difficulties, and constipation are rarely troublesome and may generally be controlled by reduction of dosage. Other side effects associated with the use of anticholinergic drugs include tachycardia, palpitation, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, drowsiness, and rash.

Dosage: Should be adjusted according to individual patient response. Average and maximum recommended dose is 1 tablet three times a day; in the a.m., early p.m., and at bedtime. See product literature for full prescribing information.
Supply: Robinul (glycopyrrolate 1 mg.): Robinul Forte (glycopyrrolate 2 mg.): Robinul-PH (glycopyrrolate 1 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming); Robinul-PH Forte (glycopyrrolate 2 mg.) with phenobarbital 16.2 mg. (Warning: may be habit forming), in bottles of 100 and 500 tablets. A. H. Robins Company, Richmond, Va. 23220.

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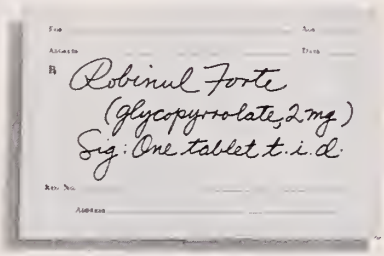
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Six years ago the A. H. Robins Company introduced glycopyrrolate, a unique anticholinergic agent described in the prescribing literature as more closely approaching the ideal compound for controlling gastric hyperacidity and hypermotility of the G-I tract. Although glycopyrrolate (Robinul Forte) d good acceptance among numerous physicians, others just didn't seem to want to give it a try, ably because the anticholinergic they were al- using was giving acceptable results.

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Next: Wait 10 days or until your patient comes in for his next appointment and get his "verdict" as to how he feels. Examine all the evidence and make your evaluation of his condition.

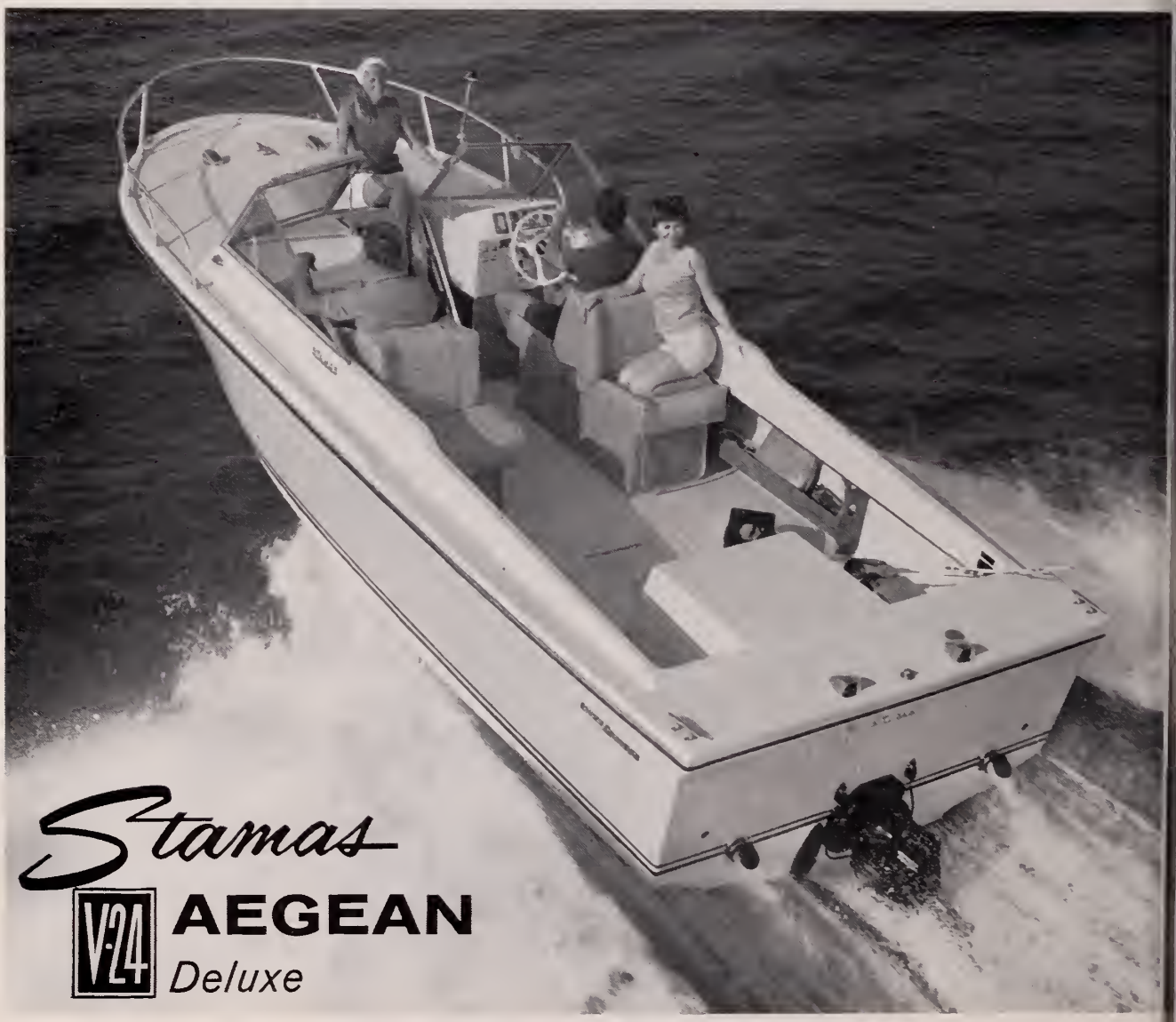


Finally: Render **your** verdict. If it's "significant improvement and marked relief of symptoms," then we believe you'll agree that Robinul Forte has proved its worth, and we rest our case. If not, consider our case for Robinul Forte closed. That's a Fair Trial, Doctor, and it's all we ask.

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The summation is an important part of every case. You'll find ours on the preceding page, Doctor.

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it's a cabin cruiser.
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it's all three . . . at least.



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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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JANUARY COVER

The electronic environment of coronary care units demands the best from nurses to retain a human-to-human relationship. The new pink culottes worn by the CCU nurses at Doctors Hospital in Miami are an approach to this need.



"All Interns are Alike"

It stands to reason. They all go through the same training; they all have to pass the same tests; they all have to measure up to the same standards; they all are underpaid, too. Therefore, all interns are alike.

That's utter nonsense, of course. But it's no more nonsensical than what some people say about aspirin. Namely: since all aspirin is at least supposed to come up to certain required standards, then all aspirin tablets must be alike.

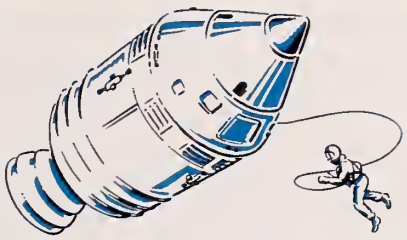
Bayer's standards are far more demanding. In fact, there are at least *nine specific differences* involving purity, potency and speed of tablet disintegration. These Bayer® standards result in significant product benefits including gentleness to the stomach, and product stability that enables Bayer tablets to *stay* strong and gentle until they are taken.

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Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

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For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

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A total daily dosage of 3 or 4 tablets will normally provide the continuous relief your patient expects. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

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Singlet decongestant-analgesic

(Each tablet contains: phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; acetaminophen, 500 mg.)

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Pen·Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis: urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN·VEE® K**

(potassium phenoxymethyl penicillin) Wyeth®



A Few New Year's Resolutions

1. To try to help work out and get a reasonable usual and customary fee agreement with the Florida Industrial Commission.

2. To attempt to help implement a highway evacuation and treatment program in Florida.

3. To work closely with our legislative council and committees so that many of the things that need to be helped through the legislature can become a reality.

4. To work at trying to implement a suitable Title XIX program in Florida.

5. To assist the Legislative Council, Judicial Council and Board of Medical Examiners in every possible way to bring about the necessary and appropriate changes in the Medical Practice Act.

6. To develop an outstanding program of postgraduate medical education for Florida physicians.

7. To recommend again, through appropriate channels to President-elect Nixon, that the Department of Health, Education, and Welfare should have a doctor of medicine at its head.

8. To assist and help implement comprehensive health planning in the State of Florida, but involving first the county medical societies through local councils.

9. To continue close liaison with the State Board of Health and to use every effort to try to keep the legislature from putting it under other than professional supervision.

10. To continue to work closely, through our delegates and through our member of the Board of Trustees (Ed Annis), with the AMA in all areas for the improvement of organized medicine.

As Mr. Carlyle once said in one of his essays, "Our duty is not to see what lies dimly at a distance, but to *do* what lies clearly at hand."

Happy New Year!

Jack A Cleveland

It's almost as if you were there to give an injection of penicillin



V-Cillin K®, Pediatric dependable oral penicillin therapy

Potassium Phenoxymethyl Penicillin

Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A]

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Comparison of Imipramine and Chlordiazepoxide in Treatment of the Depressed and Anxious Patient

John V. Verner Jr., M.D.

The depressed, anxious patient frequently presents a problem in diagnosis—is he suffering primarily from an anxiety state masquerading as depression, or rather from depression with prominent features of anxiety?

If the appropriate diagnosis seems questionable, the selection of appropriate drug therapy may be somewhat more so, as the primarily depressed patient may fail to benefit from a tranquilizer while the predominantly anxious patient may become more agitated when an antidepressant drug is administered.

Chlordiazepoxide,* a "minor" tranquilizer, has been found effective in treating anxiety.[1-5] Depressive symptoms may improve secondarily as a result of a lessening of tension and anxiety, with a consequent elevation of mood.[2,5] Depression, however, caused by endogenous factors is not significantly affected.[5]

Imipramine,** an effective antidepressant,[6-11] has been reported in some studies to relieve the clinical symptoms of anxiety, while in others a beneficial effect was not seen. In particular, patients with "episodic anxiety" without the classical features of depression have responded well to imipramine and other antidepressants, but have failed to benefit from chlordiazepoxide, meprobamate or barbiturates.[12] Because of their favorable response to antidepressant treatment, such patients sometimes have been considered to be latent depressives.

A beneficial effect of imipramine in anxiety would not be unexpected in view of the chemical relationship between imipramine and the phenothiazines. In a detailed review of the pharmacology of imipramine, Klerman and Cole[13] noted that imipramine resembled a weak phenothiazine in the early behavioral studies in animals, but that it has since been differentiated from the phenothiazines in ways that may relate to its clinical antidepressant effect.

A paradoxical effect of chlordiazepoxide[14] and imipramine[15] on anxiety has been described in normal subjects. Chlordiazepoxide, 15 or 30 mg. daily for one week and imipramine, 150 mg. daily for one week, each reduced anxiety levels in subjects who were initially rated as "high" anxious,

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*Librium® (brand of chlordiazepoxide) hydrochloride, 7-chloro-2-methylamino-5-phenyl-3H-1,4-benzodiazepine 4-oxide hydrochloride, Roche Laboratories, Division of Hoffman-LaRoche, Inc., Nutley, N. J.

**Tofranil® (brand of imipramine) hydrochloride, 5-(3-dimethylaminopropyl)-10,11-dihydro-5H-dibenz [b,f] azepine hydrochloride, Geigy Pharmaceuticals, Division of Geigy Chemical Corporation, Ardsley, N. Y.

according to results of psychological testing; however; the initially "low" anxious subjects tended to exhibit increased levels of anxiety on either drug.

Normal subjects also were categorized as "high" or "low" depressives in the imipramine study.[15] The "high" depressed subjects became significantly less depressed while, paradoxically, the "low" depressives tended to become more depressed on drug. Placebo produced little change in depression scores.

Because of such conflicting reports, it was decided to perform a double-blind study to determine whether imipramine or chlordiazepoxide would be more effective in the initial treatment of depressed, anxious patients attending a general medical clinic.

Patients

Of the 23 outpatients initially chosen for study, 20 returned for complete evaluation. Common among the 20 patients were symptoms of severe depression and anxiety which had been present for periods of two months up to five years.

There were four men and 16 women aged 15-59 years (Table 1). Eight patients were diagnosed as having neurotic depression; nine, reactive depression; one, involutional melancholia and two, schizoaffective disorder. Ten patients had associated disease: menopausal syndrome in four, with anemia in one and hyperthyroidism in another; among the other six, one patient each had surgical menopause and hypercholesteremia, severe chronic asthma, hypothyroidism, congenital pulmonary stenosis, hypertension and abdominal pain with a prior history of ulceration, and, finally, cortical atrophy with temporal dysrhythmia and seizures.

One or more supportive medications had been prescribed for seven patients: thyroglobulin (2), conjugated equine estrogens (3), ethchlorvynol (1), antiasthmatics (1), diphenylhydantoin (1) or quinalbarbitone (1).

Design of Study

Identical-appearing coded capsules* of imipramine (25 mg. each) and chlordiazepoxide (10 mg. each) to be taken three times a day were assigned according to a randomized procedure. A double-blind technique was followed so that neither the patient nor the physician would know which medication had been administered until the codes had been broken.

If symptoms improved during the three week trial, the assigned medication would be continued for an indefinite period. If symptoms failed to improve, the drug code would be broken and, according to need, the alternate medication would either be added or substituted. Observation of the patient and evaluation of his response would continue.

Evaluation: The severity of target symptoms (depressed mood, difficulty in concentration, guilt feelings, loss of energy, sleep disturbance and anxiety) was determined prior to therapy using the Minnesota Multiphasic Personality Inventory (MMPI), and at about three week intervals during treatment. Evaluation of improvement was based upon the physician's clinical judgment and was rated as: + 3 (complete remission), + 2 (moderate), + 1 (slight), 0 (no response) and — 1 (worse). Symptom responses for each patient were summarized to provide an overall response, using the same 5-point scale.

*Investigational supplies were prepared by Geigy Pharmaceuticals, Division of Geigy Chemical Corporation, Ardsley, N.Y.

Table 1.—Patient Distribution by Age and Sex

Age* (yrs.)	Imipramine			Chlordiazepoxide			Total Treated
	Males	Females	Total	Males	Females	Total	
< 20	1	—	1	—	—	—	1
20-29	1	2	3	1	3	4	7
30-39	—	3	3	—	2	2	5
40-49	—	1	1	1	2	3	4
50-59	—	1	1	—	2	2	3
Total	2	7	9	2	9	11	20

*Age range: 15 yrs - 59 yrs.

Clinical laboratory determinations including routine blood tests and urinalysis were performed periodically throughout the observation period, as were measurements of weight and blood pressure.

Results — Double Blind Study

At the end of three weeks when the drug code was broken, it was found that nine patients had received imipramine and 11 chlordiazepoxide. One patient in each group discontinued the assigned drug within the three week period because of side effects: dry mouth and other atropine-like effects in a patient taking imipramine, and severe drowsiness in one taking chlordiazepoxide. After his evaluation was completed, the latter patient was changed to imipramine.

Response of Symptoms: Response to each of the medications during the three week study is shown in Table 2 and in Figure 1.

A complete or moderate relief of depressed mood appeared in 88% of the imipramine-treated patients, and relief of anxiety in 50%. With chlordiazepoxide, 27% of the patients had complete or moderate relief of depressed mood and anxiety. With respect to depressed mood, significantly more patients responded to imipramine than to chlordiazepoxide ($P<0.05$).

Guilt feelings were benefited in 71% and concentration difficulties in 63% of the imipramine group, whereas these symptoms improved in only about 20% of the patients receiving chlordiazepoxide. The best results in the chlordiazepoxide group were related to sleep disturbances, for which 60% of the patients obtained complete or moderate relief, compared to 40% on imipramine.

Overall Response: After three weeks, six of the nine patients (67%) treated with imipramine obtained overall complete or moderate improvement, while only two of the 11 patients (18%) on chlordiazepoxide had a similar degree of improvement (Table 3).

Of the two imipramine-treated patients who failed to improve, one had a neurotic depression for which electroconvulsive therapy appeared to be indicated. The other, a patient with reactive depression, had been treated for only eight days when therapy was discontinued because of side effects. Five patients on chlordiazepoxide failed to improve; three with neurotic depression, and two with reactive depression. These patients were among those who were subsequently given imipramine.

Thus, with the exception of sleep disturbances, the symptomatic improvement in patients receiving imipramine for three weeks appeared to be superior to that recorded in the chlordiazepoxide-treated group, even with respect to anxiety.

Follow-up — Open Clinical Study (19 Patients)

Imipramine or Chlordiazepoxide Alone (6 Patients). Because of satisfactory results obtained during the double-blind trial, four patients were maintained on imipramine alone for seven

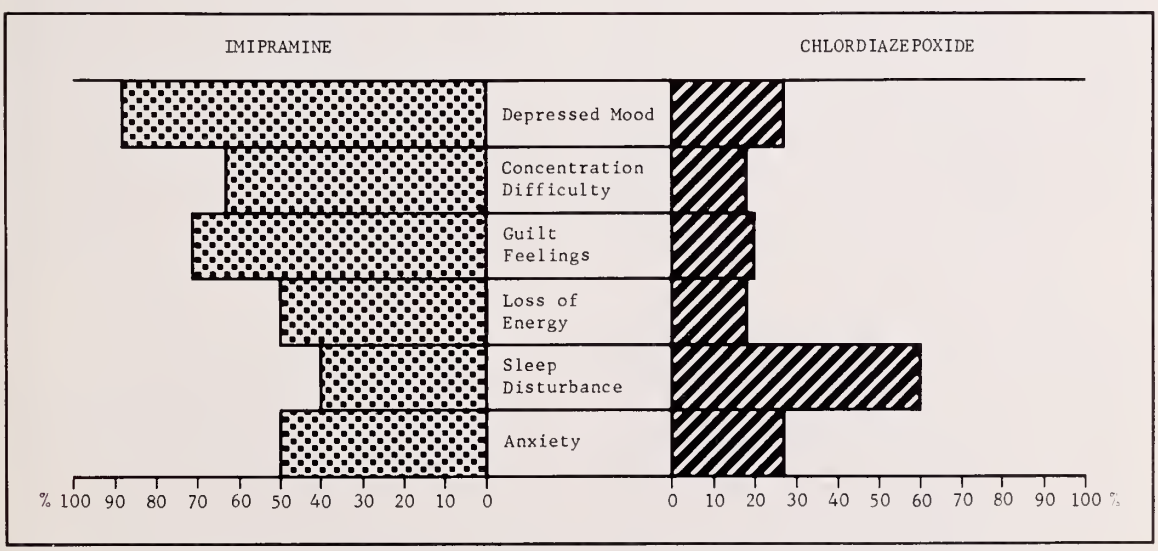


FIGURE 1. RESPONSE OF TARGET SYMPTOMS TO IMIPRAMINE AND CHLORDIAZEPOXIDE: PERCENT OF PATIENTS WITH COMPLETE OR MODERATE IMPROVEMENT.

Table 2.—Response of Target Symptoms — Double Blind Study

Symptoms	Imipramine						Chlordiazepoxide					
	Response						Response					
	Complete	Moderate	% (C+M)	Slight	None	Total*	Complete (C)	Moderate (M)	% (C+M)	Slight	None	Total*
Depressed mood	7	—	88	—	1	8	2	1	27	5	3	11
Concentration difficulty	4	1	63	1	2	8	2	—	18	5	4	11
Guilt feelings	5	—	71	1	1	7	2	—	20	3	5	10
Loss of energy	4	—	50	2	2	8	2	—	18	5	4	11
Sleep disturbance	2	—	40	—	3	5	4	2	60	3	1	10
Anxiety	3	1	50	2	2	8	2	1	27	6	2	11

*Total = number of patients with specific symptom; one patient who discontinued imipramine because of side effects is excluded from evaluation.

Table 3.—Overall Response According to Diagnosis — Double Blind Study

Diagnosis	Imipramine						Chlordiazepoxide					
	Response						Response					
	Complete (C)	Moderate (M)	% (C+M)	Slight	None	Total	Complete (C)	Moderate (M)	% (C+M)	Slight	None	Total
Neurotic depression	1	1	67	—	1	3	1	—	20	1	3	5
Reactive depression	2	—	50	1	1	4	1	—	20	2	2	5
Involutional melancholia	—	1	100	—	—	1	—	—	—	—	—	—
Schizoaffective disorder	1	—	100	—	—	1	—	—	0	1	—	1
Total	4	2	67%	1	2	9	2	—	18%	4	5	11

to 15 weeks, and two on chlordiazepoxide alone for seven to eight weeks. All but two patients, one from each group, maintained their initial improvement:

A woman with involutional melancholia and menopausal syndrome of five years' duration had achieved moderate improvement with complete relief of depressed mood and guilt while taking imipramine, but anxiety and other symptoms were less improved. After eight weeks on imipramine the patient relapsed and electroconvulsive therapy was recommended for control of symptoms.

A 24-year-old schizoaffective woman in the chlordiazepoxide group had exhibited depressive symptoms for nine months. She improved slightly soon after beginning chlordiazepoxide, but suffered a complete relapse after taking the drug for seven weeks and was subsequently hospitalized for electroconvulsive therapy.

Results on Changing to the Alternate Medication (6 Patients). None of the imipramine patients were changed to chlordiazepoxide, while six patients who had failed to improve satisfactorily on chlordiazepoxide were started on imipramine. Depressive symptoms improved markedly in each one following the initiation of imipramine.

Results With Combined Therapy (7 Patients). Three patients from each drug group received a course of the two medications in combination following completion of the initial trial. Additional benefit was apparent in all six patients, primarily with respect to depressive symptoms when imipramine (or in one patient, desipramine) was added, and in sleep disturbances when chlordiazepoxide was added.

A patient with neurotic depression (possibly a schizoaffective) failed to respond to imipramine, either when it was given alone or in combination with trifluoperazine, a tranquilizing agent. Administration of electroconvulsive therapy was considered necessary.

Adverse Reactions

Four patients who had received imipramine alone reported eight side effects (Table 4). The most frequent complaint, dry mouth (in each of the four), was a manifestation of the slight atropine-like effect of imipramine. One patient (11%) discontinued imipramine after eight days because of a dry mouth, "choking" sensation and lightheadedness.

Two patients exhibited side effects when chlordiazepoxide alone was administered, and both (18%) discontinued the drug (at 12 and 29 days, respectively) because of marked drowsiness in one instance and acute abdominal pain in the other. In the latter patient, a woman with chronic pancreatitis, the relationship between chlordiazepoxide therapy and the episode of pain seemed questionable, as this symptom does not appear to previously have been associated with chlordiazepoxide. Since the patient had failed to improve appreciably while taking chlordiazepoxide, she was changed to imipramine 25 mg. three times a day, later reduced to twice a day. Symptoms cleared, and no exacerbation of the pancreatitis was apparent.

Blood pressure (standing, and lying or sitting) did not vary significantly in the patients who received either imipramine or chlordiazepoxide alone. One patient who received these medications in combination, however, developed orthostatic hypotension: blood pressure was 85/60 mm. Hg standing, as compared to 120/80 mm. Hg sitting. The patient had remained normotensive when imipramine was administered alone, so that chlordiazepoxide was the probable cause. Hypotension is a potential side effect with either drug, however.

No significant alterations in weight were observed during the study.

Laboratory Findings

In a 15-year-old boy with asthma and eosinophilia (32%) the administration of imipramine was associated with a reduction of the eosinophile count toward normal (7% post-therapy). The patient not only obtained complete relief of depression and anxiety during nine weeks of imipramine treatment, but substantial relief of asthmatic symptoms as well. Otherwise the results of routine blood tests in addition to urinalysis were essentially unchanged from pretherapy readings throughout the observation period.

Conclusion

Results of the three week, double-blind trial indicated that imipramine is a more effective agent than chlordiazepoxide for the initial treatment of the depressed, anxious patient. This is emphasized by the observation that most patients whose depression and anxiety initially had failed to respond to chlordiazepoxide improved markedly when imipramine was substituted. In some instances, greater benefit was obtained when the two drugs were given in combination. Depressive

symptoms decreased when imipramine was added to the chlordiazepoxide regimen, and sleep disturbances improved when chlordiazepoxide was added to imipramine. One of the four patients who were maintained on imipramine alone relapsed after about two months, as did one of two patients maintained for about the same duration on chlordiazepoxide. Both required electroconvulsive therapy.

In this study, the incidence of side effects was higher in the imipramine group; four of nine patients treated had side effects, with one discontinuing therapy, as compared with two of 11 patients receiving chlordiazepoxide, both of whom discontinued taking the drug. One other patient developed orthostatic hypotension when chlordiazepoxide was added to the imipramine regimen. In all cases, side effects cleared promptly upon discontinuation of treatment.

There were no instances of aggravation of symptoms associated with either drug—anxiety did not become worse in patients taking imipramine, nor did the depressive mood in patients who received chlordiazepoxide.

Although more extensive trials would be required to corroborate the results of our study in medical outpatients, imipramine would appear to be an effective, well-tolerated agent for the initial treatment of depression and anxiety. A mild sedative or minor tranquilizer such as chlordiazepoxide might be prescribed as necessary to induce sleep and so further relieve tension.

Summary

In a double-blind trial of three weeks' duration, 20 outpatients suffering from severe depression and anxiety received either imipramine 75 mg. daily or chlordiazepoxide 30 mg. daily. Overall satisfactory response (complete or moderate) occurred in 67% of the imipramine group compared to 18% of the chlordiazepoxide group.

In regard to the individual target symptoms, depressed mood responded well to imipramine in a significantly larger number of patients ($P < 0.05$). Complete or moderate relief of anxiety was experienced by 50% of the imipramine-treated patients compared to 27% of patients treated with chlordiazepoxide. Only in sleep disturbance did chlordiazepoxide exert a more beneficial effect than imipramine.

During the follow-up (open clinical) trial, six patients previously unresponsive to chlordiazepoxide improved markedly on imipramine. Six others with poor results (three from each drug group) benefited from combined medication.

Side effects occurred more often with imipramine, but usually were mild and required drug withdrawal in only one patient (11%) who complained of dry mouth, choking sensation and lightheadedness. Chlordiazepoxide was discontinued in two patients (18%) because of acute abdominal pain in one and severe drowsiness in the other.

In general, the overall results showed that imipramine seems to be a more suitable agent than chlordiazepoxide for the primary treatment of the depressed, anxious patient. Occasionally, however, a patient may respond best to a combination of both drugs.

Table 4.—Side Effects

Side Effect	Imipramine*		Chlordiazepoxide**	
	No. Pts.	Therapy Stopped	No. Pts.	Therapy Stopped
"Choking" sensation	1	1	—	—
Constipation	2	—	—	—
Drowsiness	—	—	1	1
Dry mouth	4	1	—	—
Lightheadedness	1	1	—	—
Pain, abdominal	—	—	1	1
Total	8	3	2	2

*Four patients had eight side effects; one patient stopped the drug because of three side effects.
**Two patients had side effects and both discontinued therapy.

References

1. Chlordiazepoxide in Anxiety States. 1. Short-Term Study. (General Practitioner Clinical Trials), Pract. 195:689, 1965.
2. Lederman, S. J. et al: Observations on the Effect of Chlordiazepoxide in Patients Requiring Psychiatric Treatment, J. New Drugs 1:114, 1961.
3. Maggs, R., et al: Chlordiazepoxide (Librium). A Clinical Trial of Its Use in Controlling Symptoms of Anxiety, Brit. J. Psychiat. 110:540, 1964.
4. Tobin, J. M. et al: New Psychotherapeutic Agent, Chlordiazepoxide. Use in Treatment of Anxiety States and Related Symptoms, J.A.M.A. 174:1242, 1960.
5. Yochelson, S.: Effect of Chlordiazepoxide on Specific Symptoms of Psychiatric Patients and Facilitation of Psychotherapy, J. Clin. Exper. Psychopath. 22:79, 1961.
6. Angst, J.: A Clinical Analysis of the Effects of Tofranil in Depression: Longitudinal and Follow-up Studies. Treatment of Blood-Relations, Psychopharmacologia 2:381, 1961.
7. Edwards, G.: Comparison of the Effect of Imipramine and Desipramine on Some Symptoms of Depressive Illness, Brit. J. Psychiat. 111:889, 1965.
8. Pollack, B.: Clinical Findings in the Use of Tofranil in Depressive and Other Psychiatric States, Am. J. Psychiat. 116:312, 1959.
9. Strauss, H.: Office Treatment of Depressive State with a New Drug (Imipramine), New York State J.M. 59:2906, 1959.
10. Waldron, J., et al: The Management of Depression in Hospital: A Comparative Trial of Desipramine and Imipramine, Brit. J. Psychiat. 111:511, 1965.
11. Overall, J. E., et al: Imipramine and Thioridazine in Depressed and Schizophrenic Patients, J.A.M.A. 189:605, 1964.
12. Klein, D. E. et al: Delineation of Two Drugs—Responsive Anxiety Syndromes, Psychopharmacologia 5:397, 1964.
13. Klerman, G. L., et al: Clinical Pharmacology of Imipramine and Related Antidepressant Compounds, Int. J. Psychiat. 3:267, 1967.
14. Barrett, J. E. and Dimascio, A.: Comparative Effects on Anxiety of "Minor" Tranquilizers in "High" and "Low" Anxious Student Volunteers, Dis. Nerv. Syst. 27:483, 1966.
15. Dimascio, A., et al: Effects of Imipramine on Individuals Varying in Level of Depression, Am. J. Psychiat. 124:8, 1968. (Suppl.)

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editorial comment

ROGER E. PHILLIPS, M.D.

With the advent of more specific chemical treatment of emotional and mental disorders, psychiatry and psychiatrists have moved closer to the mainstream of general medical practice. Advances in psychiatry have resulted in recognition of the importance of emotional factors in the etiology of illness in general. It has become imperative that every physician, general practitioner and specialist alike, have more knowledge of psychiatry and psychiatric treatment. Training in psychiatry is given more attention in medical schools today than 30 years ago; therefore, practitioners are recognizing and treating patients with emotional problems. The commonest involve anxiety and depression.

As new drugs are introduced and vigorously promoted by the pharmaceutical houses, the physician is likely to become confused by the complex chemical formulae and the claims made for each variation in structure. Controlled clinical investigation, such as that reported by Dr. Verner in this issue of the JOURNAL, is more immediately helpful to the practitioner, and does reduce the amount of "trial and error" attempts at treatment.

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Treatment of Malaria

W. Dean Steward, M.D.

This article is a resume taken from a symposium on the current status of malaria presented by the sections on Preventive Medicine and Military Medicine of the American Medical Association at the 1968 annual meeting in San Francisco. Dr. Steward attended as a consultant to the Florida State Board of Health.—Ed.

Malaria is a very real medical problem to members of the armed forces in South Vietnam. Since the system of rotation allows these men to return to their homes direct from this country, clinicians should be alert to a disease which has seldom been encountered here in America in recent years. The potential for its transmission by mosquitoes nationwide is small; however, Florida may be an exception. Transmission by transfusion can be prevented by careful donor selection.

The annual attack rate among armed forces personnel in South Vietnam is 15.5 per 1,000 persons. It is higher in the lower enlisted grades and among men in active combat, for obvious reasons. More than 9,000 cases were reported in 1967. There are two aspects to the problem: insuring that the soldier protects himself with a prophylactic drug and a mosquito bar, and actual mosquito control. This is difficult because of the terrain and type of warfare.

In temperate zone countries such as South Vietnam, chemotherapeutic prophylaxis for malaria due to *Plasmodium vivax* consists of a single tablet of 300 mg. of chloroquine base and 45 mg. of primaquine base once weekly. Dosage is continued for at least eight weeks after the soldier leaves the endemic area. If *P. falciparum* malaria is also endemic, a 25 mg. tablet of dapsone is given daily. It is continued for four weeks after departure from the endemic area.

The number of cases of malaria has been gradually declining in the United States since the turn of the century; however, with return of troops from South Vietnam, reported cases increased from 154 in 1964 to 2,815 in 1967. Of this number, 93% occurred among Army personnel. The most common type has been *P. vivax* with 78.8% followed by *P. falciparum* with 13%. The remaining cases were due to mixed infestations. Most of the recorded 427 relapses occurred among patients with *P. vivax* infestations.

Malaria should be considered in the differential diagnosis of any febrile illness appearing after three or four months in a member of the armed forces returned from South Vietnam. If it is malaria, it quite likely is due to *P. falciparum* since this parasite has proved most resistant to the prophylactic drugs. Examination of smears to identify the species of parasite is important; however, treatment should not be postponed for this definitive diagnosis. The acute case may resemble the shock-like state of meningotoxemia. The disease is potentially dangerous because of brain involvement.

In the seriously ill patient, 650 mg. of quinine in 300 cc. of saline should be administered intravenously in one to eight hours with constant electrocardiographic monitoring. Total dosage should not exceed 1,950 mg. in 24 hours. As soon as possible medication should be given orally. Patients less seriously ill may be given chloroquine base intramuscularly in dosages of 200 to 300 mg. every eight hours. When the patient responds sufficiently, the drug should be given orally. Steroids appear to be of some value in the treatment of cerebral complications and the anticoagulant drugs may be helpful in combating intravascular complications. Manitol administered intravenously may be of value if renal shutdown occurs.

The treatment recommended for malaria due to *P. vivax* is chloroquine base 600 mg. immediately; 300 mg. in six hours, then 300 mg. on the second and third days. Primaquine base 15 mg. daily for 14 days is also given. This regimen should give a 98% cure rate. If a relapse occurs, the treatment program is repeated.

The treatment schedule for malaria caused by *P. falciparum* resistant to chloroquine among Army troops in South Vietnam has consisted of quinine 650 mg. three times a day for 10 days; pyrimethamine 25 mg. twice daily for three days, and dapsone 25 mg. daily for a minimum of 28 days. Sulfisoxazole 500 mg. four times daily for five days has been substituted for dapsone on occasion. Cure rates have ranged from 97% to 99%. A differing third drug* is used for patients in whom the disease has recurred. Continued chemotherapeutic prophylaxis is recommended to prevent relapses in the event a mixed infestation (*P. vivax*) is present.

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*Sulformethoxine (may not be available in the United States).

editorial comment

FRED A. BUTLER, M.D.

Dr. Dean Steward's timely and informative article on the drug management of Vietnam malaria reminds us that after nearly a generation Americans again are renewing their acquaintance with military malaria. This disease is a bona fide ancient member of the clan of dread maladies, dysentery, typhoid, plague, yellow fever, influenza and cholera, which have hobbled military adventures and often changed the expected course of history over the centuries. Military malaria results on the introduction of a large pool of susceptible individuals into an endemic area lacking in malaria control and disordered by the chaos of war. The ubiquitous local inhabitant in such an area has a hard-earned partial immunity due to lifelong exchange of plasmodia with anopheles mosquitoes and is a ready source of infection for the soldier in the field. Usually mosquito breeding sites are never more prevalent than in the torn and neglected terrain of war and Vietnam, undoubtedly, is no exception.

New drugs, beginning in World War II with the now almost obsolete atabrine, have greatly changed the historical malaria picture. Several afford a high degree of suppression of clinical malaria, although a rate of 15.5 cases per 1,000 per annum suggests that drug protection in Vietnam is not always effective or used. However, present therapy is most impressive. Aside from the occasional case of relapsing falciparum malaria with an unusually heavy infestation, informed clinical management is not difficult once a diagnosis is made.

Preparation of thick film malaria slides and recognition of parasites is something of a lost art in most United States hospitals. Even though immediate therapy is advised in acutely ill patients suspected of malaria, accurate diagnosis is most essential. Availability of regional laboratories where prompt slide diagnosis by experienced microscopists can be provided is worthy of consideration.

Endemic malaria has been nonexistent in the United States since before World War II. Return of many malarious men from overseas during 1942-1945 did not spark outbreaks despite widespread fears and dire predictions. This was due, without doubt, to lack of concentrations of heavily infected men in any area, effective antimosquito measures, and prompt treatment of relapsing service men. That malaria will again appear as an indigenous disease is, therefore, most improbable in light of advances in mosquito control and public health during the last 20 years.

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Dyslexia
An Educator's View

Philip H. Mann, Ed.D.

Individuals responsible for the education of children are becoming more and more concerned with children who appear to be of normal intelligence but do not learn. There are many types including the deaf, blind, and retarded. There are also those who are quite perplexing. Although the basic integrity of their input systems such as sight and hearing and the output system such as speech appear to be in good order and mental ability essentially within normal range, learning does not proceed at a normal pace. These children have been labeled neurologically impaired, emotionally disturbed, perceptually handicapped, brain injured, educationally retarded, dyslexic, and aphasic.

The terms dyslexia and aphasia are essentially medical terms and suggest, appropriately so, that the initial interest group in this area of learning disabilities were physicians. This has also been true of mental retardation where early significant contributions were made by physicians such as Itard, Seguin and Montessori. However, as Binet pointed out, "After the damage, the cure." The implication here is that educators begin where the child is presently functioning.

In order to do a more effective job of program planning or prescriptive teaching, the teacher needs to understand the components of each child's behavior patterns and what is academically appropriate for children of different ages. He also needs to utilize the contribution of other disciplines such as medicine and psychology.

Those involved with the education of children must be continually cognizant of the fact that each child is an individual, uniquely different in physical characteristics, personality and general capacity but capable of making a contribution. Educators must consider likenesses so that concern for differences are kept in the proper perspective.

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Presently there is a somewhat unique situation in education. At the grass roots level for the first time, teachers are recognizing the importance of using the data supplied by ancillary disciplines in educational programming for children described as disabled learners. We have been talking about pacing, readiness, maturation and other growth concepts for years, but few educators really understand the potential contribution of medicine in the educational process, especially with disabled learners.

Although physicians, educators, psychologists, and social workers relate to different aspects of the problem of dyslexia, it has become evident that only by working together can real progress be made in ameliorating this deficiency in children. Change is occurring nationally in terms of new techniques and methodologies developed by the various disciplines; however, regardless of the orientation the concern is the same: why doesn't the child learn?

A series of articles by Benton,[1] Rubin,[2] and Smith[3] published in the October issue of the Journal stimulated this author to attempt to give an educator's view of the somewhat nebulous verbal construct commonly labeled dyslexia. In effect, the purpose of this paper is twofold: to try to define and delineate the disorder and then attempt to synthesize the possible contributions that medicine and education can make, working together toward a common end.

The responsibility for diagnosis and implementation of appropriate programs for children with specific learning disorders should be shared by many individuals. If the teacher does not or cannot translate the findings of the neurologist or ophthalmologist into educational data, then it cannot be expected that an appropriate program will be instituted or that changes in the child's behavior will occur. The teacher, however, in the final analysis has primary responsibility for the education of the child. Some teachers, unfortu-

nately, have only "one pill in their bag" and it may be only the use of one basal reading series totally inappropriate for teaching reading to a dyslexic child.

If medical personnel want to contribute to the child's education in terms of identifying specific deficits, they should write a prescription that the teacher will understand. Follow-up is vitally important to determine whether or not progress has been made. This implies follow-up with school personnel as well as with the child.

When an ophthalmologist indicates that the child has fusion problems or difficulty with directionality, he cannot assume that the teacher understands these concepts or will be familiar with the appropriate activities that need to be applied to ameliorate the deficits. We have an abundance of material available in the area of perceptual-motor training and teachers are still trying, regardless of the specific handicap, to plug children into programs, or apply the same activities to all children regardless of their appropriateness.

Dyslexia: A Multi-Faceted Problem

It is generally accepted among educators that the term "learning disability" is a more encompassing construct describing children who have difficulty in learning resulting from deficiencies in perception, motor, cognition, or a combination of each of these areas. Dyslexia, however, is generally thought of as being a part of the larger construct of learning disabilities. Kephart[4] indicated that "dyslexia by definition is the result of a brain dysfunction." Bannatyne[5] on the other hand prefers to use the term in a more generic sense. He stipulates four types of dyslexia: 1. Primary emotional communicative dyslexia; 2. Minimal neurological dysfunction dyslexia; 3. Genetic dyslexia, and 4. Those who have suffered from social, cultural and educational deprivation.

Dr. Benton suggested 10% as the average figure for the incidence of dyslexia in Broward County schools. I agree that this figure represents the population of learning disabled children; however, brain injury may be present in a much smaller percentage.

Let us carry this one step further and state that the process of reading has many facets in which perception, language, and affect all play a vital role.

Perception involves the organization of squibbles or marks into forms and shapes. These marks also take a position in space; the space being a white field (visual component). They also have an auditory referent (audio component). Some children suffer distortion of incoming stimuli resulting in the failure to synthesize certain sensory impressions. They are said to be "perceptually impaired."

Language, on the other hand, involves the translation of these marks or squibbles, assigned specific audio referents, into meaningful words, phrases, and sentences for comprehension and interpretation. The word closure would be applicable in describing this phenomenon.

To be an effective reader involves the understanding of context clues (word recognition), adequate rate of reading, unfolding of meaning, depth of vocabulary, proper syntax and affect as it applies to reading style. Memory also plays an important role. The nature of the reading process requires that we deal with many aspects of the problem at the same time: perception, language, and affect.

Few will dispute the fact that there is an emotional component that must be dealt with both in diagnosis and in designing a specific program of remediation.

Further analysis suggests that the squibbles or marks must become distinguished from each other and have meaning in and of themselves. The child may have difficulty in disassociating those which are to be learned from the extraneous ones. These irrelevant marks distract from that which is to be learned.

Confusion in seeing relationships sometimes manifests itself in reversals where the child may not be able to distinguish b from d, or perceives saw for was.

Problems in seeing sequential order of letters or words result from confusion in seeing spatial relationships. Visual discrimination deficits can result in the inability to distinguish one letter from another, C from G, for example.

In addition to these factors, there is a manipulative aspect to the problem that involves a degree of visual-motor integration. The child must be able to translate the visual image into a motor action. He must be able to reproduce the configuration at will; copying, reproducing from memory, etc. Ability here leads to more efficient

learning in terms of reading. In this way, multi-channel systems are being employed, i.e., visual, kinesthetic and auditory, if the child verbalizes the action.

These squibbles are learned from left to right in sequential order. The child also has to be able to go from line to line and from the top of the page to the bottom. This requires a degree of sophistication of visual control mechanisms.

Good form perception, form constancy, and orientation are necessary for the efficient analysis of words. Disassociation of words or letters often is exhibited by children who have difficulty in these areas.

A machine cannot operate at top efficiency if its parts are not synchronized. When auditory and visual processes are not synchronized to operate as a functional unit, faulty perceptions occur. Some children process one system but not the other. A more serious problem is the inability to put them together.

In reviewing the components of reading, the following considerations must be met:

1. Can the child translate the symbols into words (perception)?
2. Do these words have meaning to the child (basic fund of information and vocabulary)?
3. Do these words relate to each other in a meaningful way (syntax)?
4. Can the child synthesize the visual and auditory clues with the meaningful word (memorization)?

It becomes evident that language and perception must be correlated for an efficient operation. Reading is a dynamic process in which perception, language, and affect function in concert with each other.

Physician Complements Teacher

Since 1960 great strides have been taken in program planning. This has come about mainly through the pressure of parent groups, professionals in the area of exceptional children, and teachers who were perplexed in trying to meet the challenge of the disabled learner. Along with other para-medical individuals, the medical profession has taken a great interest nationally in programs for children with specific learning disabilities. Physicians have had a great influence on legislation in the area of the handicapped in general and they can do a great deal toward giving impetus to the establishment of classes in the public schools for children who exhibit learning disorders. Medical personnel are in a position to be the first to identify any abnormality in the young child which may be detrimental to learning. This information should be made available to the school before continual failure in reading has an effect on the child's personality. Physicians need to be more cognizant of physiological phenomena that could result in inadequate or faulty learning.

In essence, identification of "high risk" children should be the goal of medicine and education. This implies screening as opposed to diagnosis which is an *ex post facto* concept. A diagnostic center in each community utilizing a multi-interdisciplinary approach would be ideal. Physicians could educate teachers in the dynamics of neurological and ophthalmological diagnoses as they relate to learning. This is a two-headed coin. Trained educational specialists would also share techniques and methods presently used to ameliorate specific deficits. Professionals in the community could be brought in for case study observations and practicum experiences. In this way, diagnosis and amelioration become a dynamic process and the gap between birth and school can be bridged. Children would be identified early, and ameliorative procedures begun at age four and not at age seven or eight, as is found in most cases today.

It is recommended that interested physicians share workshops, symposiums and other communicative associations such as reciprocal conventions with teachers for better understanding of mutual goals. Physicians interested in research in this area are missing out on fertile grounds for the field testing of ideas. The classroom, in the final analysis, is the best testing ground. This is particularly true in the area of ophthalmology.

Medical personnel have on one hand derided such people as Delacato for being unscientific, and on the other hand they say "many of the things that these two authors had to say were similar to the results of our research and therefore gave us a stimulus to proceed further"[1] (Benton). Instead of "throwing out the baby with the bath water," researchers should test out in the public schools the claims and assumptions made by promoters of any new technique or methodology.

In visiting various educational settings I have observed children "creeping and crawling"

but teachers were somewhat chary in admitting the source of these techniques.

The fact that a child with visual problems under medical supervision fails in school is no indication that your technique is of no value. Teachers do not always understand the physician's intent or know what he is doing. Over the years, many have come to fear the intervention of medical people in educational affairs. In many cases this is justified. Inadequate communication among professionals has done much to alienate teachers from the medical profession. The doctor in many cases is seen as a dispenser of pills or a healer of ills, and not as a contributor to the learning process. The complexity of the disorder we label dyslexia has forced the disciplines to search each other out, each one seeking from the other that which will help him do a better job with these children.

Conclusion

Definitions of dyslexia generally reflect the philosophy of the group or organization that promulgates them. Most educators, however, would agree that this construct is part of a larger construct called learning disabilities.

The learning disabled child might best be described as one who exhibits those behaviors that indicate faulty, inadequate, or inappropriate learning which may or may not be due to brain injury. The problem of whether or not abnormal neural organization is at the base of all these problems has not been resolved. Acceptance of this definition would encourage teachers to describe children in precise behavioral terms.

The emphasis in the last decade is shifting from diagnosis and classification to remediation and amelioration of deficits. As long as we concentrate on etiology, only parenthetical interest will be given to remedy. A lesion in the third angular gyrus means little to the teacher. He cannot cure the damaged brain, but he can concern himself with systematic observation and behavioral considerations. He can also learn to utilize the contribution of many disciplines, including medicine, in the educational setting.

Many feel comfortable in labeling a phenomenon. Professionals using a verbal construct such as dyslexia or aphasia presuppose that it can now be dealt with as an entity, and all that is necessary is to find the proper "cure." Unfortunately the answer is not a simple one in the case of the learning disabled child. The complexity of the problem is as variable as the definitions currently in vogue, and in the differences found in each of the learning impaired children. Although some research has been attempted, we are essentially at the stage that alchemy was in relation to medicine. Much of what is being done, especially in the area of diagnosis, is essentially exploratory; there is a great deal that can be done with proper training and education. Until the various disciplines begin complementing each other, we will go on working in our own bailiwicks, fragmenting the learner to such an extent that we will have difficulty identifying him as a whole child.

References

1. Benton, C. D. Jr.: Dyslexia and the Private Practitioner, J. Florida M. A. 55:898-902 (Oct.) 1968.
2. Rubin, M. L.: Dyslexia and the Research Ophthalmologist, J. Florida M. A. 55:903-906 (Oct.) 1968.
3. Smith, J. L.: Dyslexia and the Neuro-Ophthalmologist, J. Florida M. A. 55:906-909 (Oct.) 1968.
4. Kephart, Newell C.: Let's Not Misunderstand Dyslexia, The Instructor, 1:62-63 (Aug.-Sept.) 1968.
5. Bannatyne, Alex.: The Etiology of Dyslexia and the Color Phonics System, International Approach to Learning Disabilities of Children and Youth, Selected Conference Papers, pp. 67-79 (Mar.) 1966.

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Immunoelectrophoresis An Approach to the Study of the Immunoglobulinopathies

Ronald R. Willey, M.D.

Immunoelectrophoresis is a relatively modern method developed to separate and permit study of certain serum proteins. Initially they are separated by electrophoresis in a medium which will allow protein diffusion (Fig 1). Following electrophoresis, polyvalent or univalent antihuman serum is applied in a trough a short distance from and parallel to the separated serum protein. As diffusion occurs, visible precipitin arcs are formed in the supporting medium where the leading edge of the antihuman serum meets the leading boundaries of the serum proteins (Fig 2). Although not all human proteins and their antisera form visible precipitates, (insulin and anti-insulin will not) more than 30 individual proteins have been demonstrated by application of this method.

Tiselius and Kabat[1] demonstrated in 1937 that antibodies are in the gamma globulin fraction. By use of polyvalent and specific antihuman sera, Heremans[2] discovered that human antibodies (immune bodies), or immunoglobulins (normal or abnormal), were located not only in the gamma globulin fraction of the routine electrophoretic pattern, but also extended to a lesser degree into the beta globulin peak and even into the alpha$_2$ globulin fraction (Fig. 3). There is disagreement whether or not all gamma globulins are antibodies. As in other areas of medicine, various investigators designated different names to the same fractions. The World Health Organization suggested a standard nomenclature for human immunoglobulins in 1964 (Table 1). [3,4]

Immunoglobulin

Structure.—All immunoglobulins contain at least two heavy and two light chains held together by disulfide bonds. The heavy chains are designated alpha, beta, gamma, etc. Molecular weight of a chain is approximately 52,000. The light chains are either lambda or kappa with a molecular weight of about 22,000 (Fig. 4).

All immunoglobulins share common antigenic structural units which are the light chains. The heavy chains are antigenically distinct and determine the characteristics of the immune bodies. Porter discovered in 1959 that the gamma G mole-



Fig 1.—The central pattern illustrates an empty antigen well on each side of the antiserum trough. The pattern on the left shows the typical diffusion of an antiserum. The pattern on the right shows the electrophoretic separation of serum proteins. The albumin and α_1, α_2, and β globulin have moved toward the anode (top). The gamma globulin has moved toward the cathode (bottom).

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This paper was presented to the Mound Park Hospital Foundation and was awarded first place.

cule also could be split into two portions by papain. The heavier fragment, molecular weight 52,000, is composed of a light chain (kappa or lambda) together with a portion of the heavy chain; and since it would bind its specific antigen it was designated Fab (antigen binding) fragment. The light fragment, molecular weight 48,000, was composed of two portions of the heavy chain (gamma) and because it would crystallize was called Fc (crystallizable) fragment.[5]

Origin.—The immunoglobulins are synthesized either in plasma cells,[6] plasmacytoid lymphocytes or lymphocytes[7] as a response to an antigenic stimulus in normal circumstances or unpredictably by neoplasms of these cell types. There are, at present, two main theories concerning the mechanism of antibody production in response to antigenic stimulation. The "template theory" suggests that the determinants on the antigen are responsible for specific protein folding and, thus, the specific configuration of the antibody molecules. The "clonal selection" theory implies there is a totipotentiality of cellular populations in the embryo and that the antigen selects a population already primed for specific antibody synthesis. Neither theory appears to explain all past observations and probably will be greatly modified by future investigations.[8,9]

The gamma G immunoglobulin is the only one normally transmitted from mother to fetus via the placenta. The half-life of the mother's gamma G globulin in the child is considered to be 20 to 30 days. Significant amounts of gamma G globulin are synthesized by the child between four and 12 weeks of age; therefore, his lowest level occurs at this age. The normal adult level is obtained between six months and two years of age. Since significant gamma A and gamma M globulins are not transported to the fetus via the placenta, these globulins are nonexistent or extremely low at birth, unless there has been an intrauterine infection. Significant gamma M is seen about eight weeks after birth and reaches adult levels by six to nine months of age. Gamma A rises rapidly between four and eight weeks of age but may not reach adult level during childhood.[10]

Disorders.—The "immunoglobulinopathies" include all quantitative or qualitative biochemical abnormalities of the immunoglobulins which are associated with varying degrees of clinical disease.

Hypogammaglobulinemia

The hypogammaglobulinemias are disorders in which one or a combination of the immunoglobu-



Fig. 2.—Immunoelectrophoretogram illustrating the patterns formed with three different antisera: polyvalent antihuman (left), univalent antihuman gamma G (center), and polyvalent antihuman immunoglobulins (gamma A, gamma G, gamma M, right).

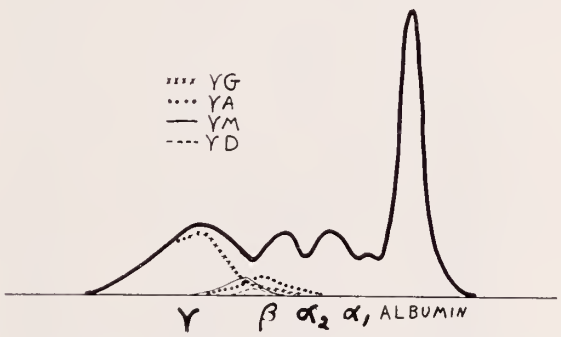


Fig. 3.—Please note that the gamma G forms most of the gamma globulin and extends into the α_2 globulin fraction. Gamma A, gamma D, and gamma M all are found in the β—gamma globulin region. Gamma A extends further into the β globulin region than either gamma D or gamma M.

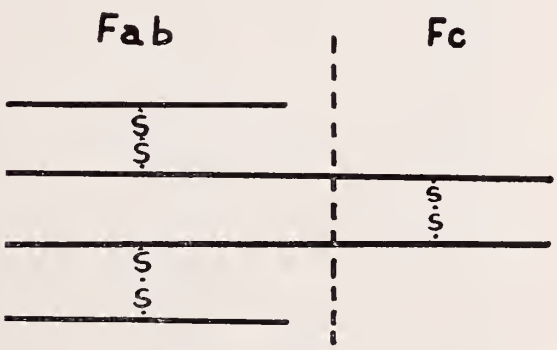


Fig. 4.—Simplified molecular structure suggested for immunoglobulin G molecule. Note two short light chains on the left (lambda or kappa) joined to the two central heavy long chains by disulfide bonds. The dotted line suggests the cleavage point when the molecule is split by papain. The fragments on the left will bind antigen (Fab fragment) and the fragment on the right is crystallizable (Fc fragment). (Modified after Porter and others).

Table 1.—Standard Nomenclature for Human Immunoglobulins with Old Names and Other Properties After Fahey[3,4] and Others.

Preferred name	Preferred symbol	Old name	Ultracentrifugation Svedberg Units	Mol. Wt. Approximately	Percent total serum antibody	Percent carbohydrate	Type of antibody	Serum concentration, Gm.%	Specific antihuman sera available commercially
Immunoglobulin G	gamma G, IgG	7 S gamma 2 gamma 2	6.7 – 7S	150,000	70-85	2.5	Viruses, Gram-positive bacteria, Antitoxins, L.E. factor	0.7 to 1.5	Yes
Immunoglobulin A	gamma A, IgA	7 S gamma 1 gamma 1A β2A	Mostly 7S 5-10% 11S Also present: 9, 13, 17S	160,000	10-20	10	Isohemagglutinins, Anti-brucella, Anti-insulin, Anti-diphtheria, Anti-thyroid.	0.15 to 0.25	Yes
Immunoglobulin M	gamma M, IgM	β2 M, 18 S gamma 1, gamma macroglobulin	18-20S	900,000 (5 subunits)	5-10	10	Heterophile Wasserman, Cold agglutinins, Gram-negative bacteria, Rheumatoid factor	0.06 to 0.17	Yes
Immunoglobulin D	gamma D, IgD	?	7S	?	Approximately 0.2	?	?	0.003	No
Immunoglobulin E	gamma E, IgE	?	?	?	?	?	Skin sensitizing antibodies Reagins	?	No

lins are decreased or nearly absent. The decrease may be due to an excessive catabolism or loss, such as might occur with certain diseases of the gastrointestinal tract or kidney. The clinical consequences depend not only upon the existence of immunoglobulin deficiency, but also upon the specific nature of that deficiency both qualitatively as well as quantitatively.[10] Most children and adults with so-called "agammaglobulinemia" have small amounts of globulin which can be demonstrated by immunoelectrophoresis; therefore, these should be more properly designated hypogammaglobulinemias or hypoimmunoglobulinemias. Adequate classification is impossible at the present time because some of the diseases are due to genetic abnormalities which are still being investigated.[11] There may be varying degrees of agenesis or partial development of the thymus and other organs of the reticuloendothelial system with a decrease in either (or both) lymphocytes and plasma cells. Some patients lack isohemagglutinins, while others may not reject a skin graft or develop circulating antibodies when stimulated with various antigens. In addition to a decrease or near absence of immunoglobulins, one or two may be depressed. Often when there is a depression, others will increase. An isolated gamma A deficiency has been found in otherwise healthy individuals.[12]

Clinically, repeated infections, pneumonia, sinusitis, otitis media, pyoderma, and even meningitis are the historical patterns of patients with hypoimmunoglobulinemia. Associated symptoms may include those of rheumatoid arthritis, dermatomyositis, ulcerative colitis[10] or malabsorption syndrome.[13] In ataxia telangiectasis, there is a deficiency of gamma A associated with progressive cerebellar ataxia, oculocutaneous telangiectasis, and frequent sinopulmonary infections.[14] Patients with multiple myeloma, lymphoma, or leukemia who lose their ability to produce immunoglobulins are said to have secondary acquired hypogammaglobulinemia. Patients with nephrosis and enteropathies may lose all serum proteins and cannot properly be classified with these immunoglobulinopathies.

Case 1.—A seven-year-old Negro boy had at least three hospital admissions for pneumonia. In 1962, at 23 months of age, the child was admitted with severe bilateral external otitis, bronchopneumonia, and moderate anemia. Review of birth and development indicated no abnormalities except repeated "respiratory infections." Weight was 24 pounds. Laboratory findings were: moderate hypochromic microcytic anemia and leukocytosis with shift to the left; urine, unremarkable; intermediate PPD, negative; stool, gum-guaiac, trace to negative. He responded to antibiotic therapy and was discharged on the seventh day.

He was readmitted on Feb. 25, 1967 with acute bronchopneumonia. He had had frequent "colds" successfully treated with antibiotics; however, on this occasion, he had not improved and was brought to the hospital with a temperature of 103°F to 105°F. There had been a six to seven pound weight loss. There were bilateral moist rales in the lungs and slight distention of the abdomen. Chest x-rays showed bilateral bronchopneumonia. The roentgen upper gastrointestinal examination and barium enema were interpreted as normal.

Laboratory results.—Admission hemogram indicated hemoglobin level 9.0 Gm.%, erythrocytes 3,630,000, hematocrit 32%, reticulocytes 4.4%, white blood cell count (WBC) 9,800 with a shift to the left, mean corpuscular hemoglobin (MCH) 25 micro-micrograms, mean corpuscular volume (MCV) 91 u^3, mean corpuscular hemoglobin concentration (MCHC) 28%. The sedimentation rate corrected, 27 mm. per hour; sickle cell preparation, negative; urine, unremarkable except for a small amount of acetone; serum urea nitrogen and electrolytes, within normal limits; serum iron, 12 mcg.% (which rose to 52 mcg.% nine days later); cephalin flocculation, 0; amylase, 200; serum protein total, 6.3 Gm.%; albumin, 5.1 Gm.%; globulin, 1.2 Gm.%; A/G ratio, 4:1; acid fast cultures, negative; stool examination, cysts of Giardia lamblia and ova of Ascaris lumbricoides. The cellulose acetate electrophoretogram demonstrated very low gamma globulin (Fig. 5).

He was treated with Antepar, Troph-Iron and antibiotics and was discharged improved on March 19, 1967.

He was readmitted on April 26, 1967 for treatment of bronchopneumonia, pleural effusion, Giardiasis and anemia. Although the chief complaint was respiratory difficulty, there was a history of occasional vomiting and diarrhea. Examination revealed a fairly well developed boy who was in mild respiratory distress with minimal flaring of the alae nasi. There were rales in the lungs, dullness at the bases and questionably "spooning" of the nails.

Laboratory results.—Erythrocytes 2,100,000; hemoglobin 5.7 Gm.%; hematocrit 23%; WBC 25,400 with a shift to the left; MCH 27 micro-micrograms; MCV 103 u^3; MCHC 28%; urine revealed trace of acetone and diacetic acid; serum iron, 78 mcg.%; sickle cell preparation, negative; platelet count, 1,014,000; sweat chloride, 9 mEq./L.; hemoglobin electrophoresis; HbA, 94.1%; HbF, 2.4%; HbA_2, 3.5%; total bilirubin, 1.2 mg./100 ml.; erythrocyte fragility, normal; glucose-6-phosphate dehydrogenase, normal; febrile agglutinins, negative; cold ag-

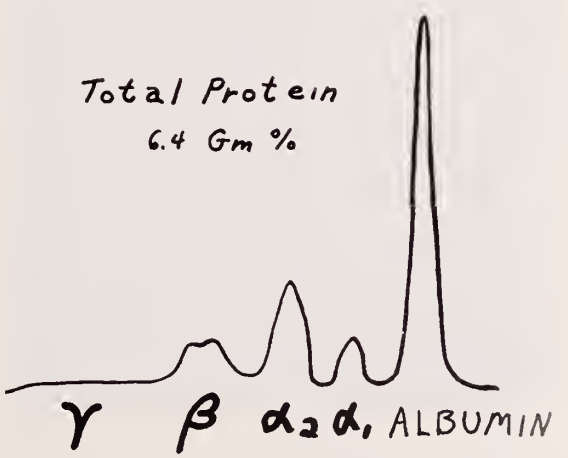


Fig. 5.—Note that the gamma globulin is markedly decreased while the other fractions appear to be within normal limits.

glutinins, negative; PPD, Coccidiodin, Histoplasmin skin tests, negative; stool, cysts of Giardia lamblia; again electrophoresis and immunoelectrophoresis indicated a deficiency of the immunoglobulins (gamma A, gamma G, gamma M) (Fig. 6).

This child had a severe deficiency of gamma A and gamma M immunoglobulins with a minimal decrease in gamma G immunoglobulin. He had a long history of recurrent infection and had had Giardiasis and Ascariasis. He had been severely anemic on more than one occasion. Fibrocystic disease of the pancreas, hemoglobulinopathies, and glucose-6-phosphate dehydrogenase deficiencies seem to have been ruled out. The normal level of albumin suggests that he had sufficient dietary protein and was not losing protein through his kidneys (negative urine protein) or intestine.

Hypergammaglobulinemia

Increases in all or some of the known immunoglobulins (or fractions of the immunoglobulin molecule) have been associated with disease, either as hyperplastic or as a neoplastic response of plasma cells, plasmacytoid lymphocytes, or lymphocytes. In hypergammaglobulinemia not associated with neoplasm, there is hyperplasia of the plasma cells throughout the reticuloendothelial system producing a heterogenous group of immunoglobulins which give a broad diffuse slightly elevated peak in the alpha$_2$ to gamma region on paper or cellulose acetate electrophoresis. This type of hyperimmunoglobulinemia may be associated with chronic infection, caused by almost any type of organism, neoplasm, liver disease, so-called "collagen diseases," or a wide variety of diseases such as sarcoidosis (usually only in cases of advanced pulmonary or liver sarcoidosis), Down's syndrome, or histiocytosis of children.[8]



Fig. 6.—Pattern formed with polyvalent goat antiserum to human immunoglobulins (gamma A, gamma G, gamma M). Note absence of gamma M, and decreased amounts of gamma G and gamma A in patient's serum (right).

Waldenstrom used the term "monoclonal gammanopathy" for neoplasms of the immunoglobulin-producing cells which synthesize more homogeneous immunoglobulins. These give a very high narrow sharp peak on routine serum electrophoresis on paper or cellulose acetate. Riva termed these "M" components and defined them as being a relatively homogeneous increase in the serum or urine concentration of one or at most a few closely related immunoglobulins. At first, it was considered that the "M" component was seen only in multiple myeloma or Waldenstrom's macroglobulinemia;[15,16] however, since then it also has been found in sera of patients with leukemia, lymphomas and carcinomas, and occasionally in patients with no known disease. While the increased amounts of immunoglobulin formed by hyperplastic cells act as antibodies, the immunoglobulins of neoplastic cells, which are biochemically similar, apparently do not serve any beneficial function. Four fairly distinct clinical entities associated with proliferation of plasma cells or lymphoid cells and abnormalities of immunoglobulin have been defined (Table 2).[17]

Three of Osserman and Takatsuka's[18] 262 cases of multiple myeloma had no "M" component and no Bence-Jones; the only abnormality was a depression of all the immunoglobulins. Some otherwise normal elderly people have a benign "M" component elevation. The highest incidence in Sweden was in the 80 to 89-year-olds of whom 5.7% had benign "M" components.[19] Also, proteins resembling Bence-Jones proteins may be identified in normal urine. In certain cases, difficulty has arisen in distinguishing gamma A type multiple myeloma from Waldenstrom's macroglobulinemia because the gamma A has formed complexes which give characteristics of macroglobulinemia.[20,21] Movement in media depending on molecular size, as well as ultracentrifugation, gave results of a macroglobulin. It was only when specific antiserum to gamma A was used that this confusion was removed. It is apparent that Bence-Jones myeloma and Franklin's heavy chain disease are illnesses where malignant cells, predominantly plasma cells, synthesize portions of the immunoglobulin molecule in an abortive attempt to make

whole molecules. Associated with this frantic overproduction of either Bence-Jones protein (light chains) or the heavy chains (Fc fragment) of Franklin's heavy chain disease is a marked reduction of the normal immunoglobulins (gamma A, gamma G, gamma M, gamma D).

Listed in Table 3 are some of the diagnostic tests used in the study of abnormal proteins.

Case 2.—An 82-year-old woman had multiple myeloma with the abnormal immunoglobulin, gamma G. Before 1966, she was told she had an aplastic anemia for which she received ten blood transfusions. In September, 1966, she was treated for congestive failure due to arteriosclerotic heart disease. The patient was admitted on Feb. 6, 1967 with progressive shortness of breath of two weeks' duration. She was cyanotic, dyspneic and perspiring profusely. Lungs were full of expiratory and inspiratory moist rales. A grade I mitral systolic murmur was heard at the apex. The liver and spleen were not palpable but the abdomen was distended. No pedal edema was noted.

Laboratory results.—Erythrocytes 2,490,000; hemoglobin 8.4 Gm.%; hematocrit 28%; leukocytes 5,900; bands 7%; neutrophils 75%; eosinophils 1%; monocytes 17%; platelets adequate; MCH 34 micro-micrograms; MCV 112 u³; MCHC 30%; VDRL nonreactive.

She was treated vigorously for acute pulmonary edema and received two units of blood. She improved and was discharged on February 16, but was readmitted one week later with shortness of breath, although she had been on digitalis and had had oxygen at home. She was perspiring freely and had very pale lips and mucous membranes. Lungs were considered clear.

Laboratory results.—Erythrocytes 2,600,000; hemoglobin 8.8 Gm.%; hematocrit 27%; leukocytes 7,600 with a normal differential except for 4 metamyelocytes and 31 band forms; blood smear, rouleaux formation; MCH 34 micro-micrograms; MCV 106 u³; MCHC 32%; Schilling test, normal; two hour postprandial sugar 90 mg./100 ml.; blood urea nitrogen 23 mg./100 ml.; SGOT 31 units; urine, unremarkable except for 10 to 20 leukocytes per high power field. Bone marrow examination showed almost complete replacement of the marrow by mature and immature plasma cells (Figs. 7, 8). Cellulose acetate electrophoresis of the serum proteins showed an "M" component in the slow gamma globulin region having more than twice the protein of the albumin peak (Fig. 9). The immunoelectrophoretogram showed wide diffuse gamma G precipitin arcs and decreases in the gamma A and gamma M precipitin arcs, when compared to normal pooled serum on the left. Thus the "M" component which caused the elevated total gamma globulin was gamma G immunoglobulin (Figs. 10, 11).

On the final admission, x-rays revealed generalized osteoporosis and a soft tissue mass associated with an osteolytic lesion of the right seventh rib. The patient died one month following diagnosis of multiple myeloma (gamma G type).

Summary

Immunoelectrophoresis is useful in diagnosing and differentiating hypergammaglobulinemias and hypogammaglobulinemias. Bence-Jones myeloma, typical multiple myeloma, Waldenstrom's macroglobulinemia and Franklin's heavy chain disease can be differentiated by immunoelectrophoresis of the serum and urine of the patient. Although not all of the genetics associated with hypogammaglobulinemia have been elucidated, immunoelectrophoresis has allowed an incomplete classification. In all cases, immunoelectrophoresis must be correlated with adequate history, physical examination, and proper laboratory studies. Examination of the peripheral blood smears and bone marrow smears and sections are essential in differentiating the hypergammaglobulinopathies.

Table 2.—Four Fairly Distinct Clinical Entities Associated with Proliferation of Plasma Cells or Lymphoid Cells and Abnormalities of Immunoglobulin, after Alper, Rosen and Janeway,[8,9] Rappaport,[17] and Others.

Disease	Serum Proteins	Urine	Cell type proliferating	Bone lesion	Lymphadenopathy Hepatosplenomegaly	Sedimentation constant in Svedberg units
Multiple myeloma	40-50% Bence-Jones 75% gamma G (↑) with depression of gamma A and gamma M 25% gamma A with depression of gamma G and gamma M	40-50% have lambda or kappa fragments (Bence-Jones)	Mature or immature plasma cells	Usually	No	7 S (usually) gamma A may also be 11S, 13S, 18S
15, 16 Waldenstrom's macroglobulinemia	gamma M increased gamma A and gamma G decreased 10-15% Bence-Jones protein	lambda or kappa chains of Bence-Jones 10-15%	Lymphocytoid cells	No	Yes	18-20S
17 Franklin's heavy chain disease	(Fc) crystallizable fraction of heavy chain increased	Fc fragment	Plasmacytoid cells	No	Yes	3.5S
Bence-Jones myeloma (light chain disease)	Either lambda or kappa chain increased	Either lambda or kappa chain	Mature or immature plasma cells	Maybe	No	3.5S

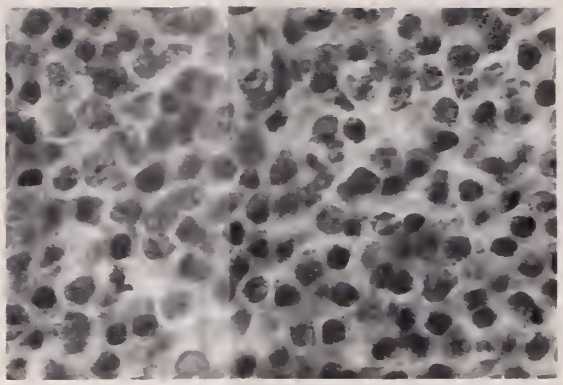


Fig. 7.—Tissue sections of bone marrow (H & E stain). Note sheets of immature plasma cells.

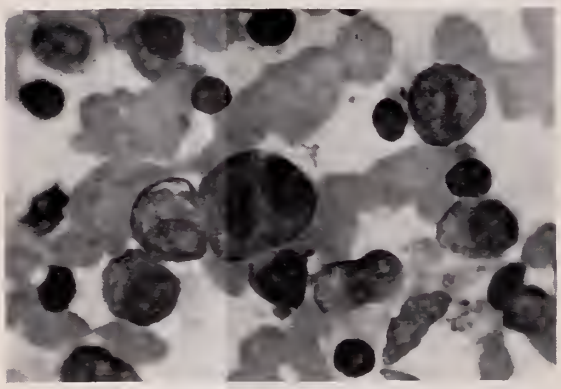


Fig. 8.—Smear of bone marrow (polychrome stain). Note plasmoblasts as well as an immature binucleated plasma cell.

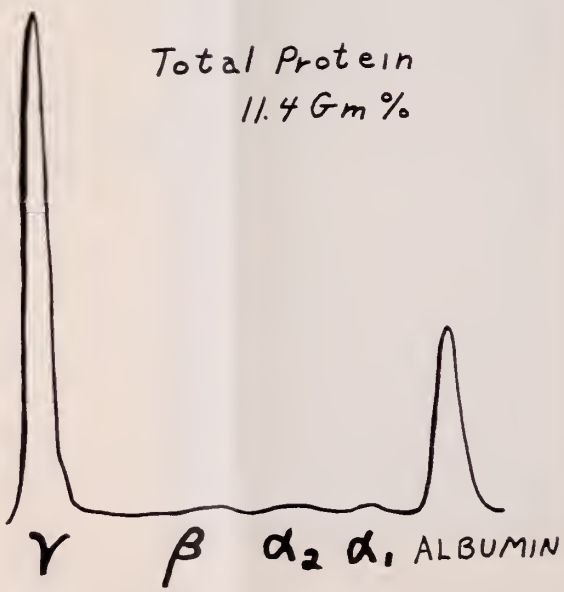


Fig. 9.—Electrophoretogram of second patient's serum showing a narrow, tall peak in the gamma globulin region. Note reduction in other serum proteins.



Fig. 10.—Pattern formed with goat antihuman immunoglobulin G. Note broad diffuse arc of patient's gamma G (right). There is an apparent increase of gamma G which has caused a second arc which runs through the central portion of the larger arc.



Fig. 11.—Pattern formed with polyvalent goat antihuman immunoglobulin (gamma A, gamma G, gamma M). Note absence of patient's gamma A and gamma M (right). The patient's gamma G has formed an arc similar to that demonstrated in the previous figure.

Table 3.—Laboratory Tests in Hypergammaglobulinemia, from Alper, Rosen and Janeway[8,9]

Test	Result
Paper and cellulose acetate electrophoresis	Probably most widely used, relatively simple, beneficial test
Liver function tests Cephalin flocculation Thymol turbidity	Results and meaning variable
Erythrocyte sedimentation rate	Usually elevated
Sia Water Test (globulin insoluble in low ionic strength solution)	Usually positive if high enough concentration of abnormal protein Pathologic gamma G gave positive result in 11%; gamma M in 50%; gamma A rarely
Bence-Jones protein in urine	Missed completely by Albustix; more cases identified with specific antiserum than with the typical heat test
Cryoglobulins (proteins which gel when cold and redissolve when warmed)	Most often found when a gamma M abnormality is present Rarely a gamma A component
Pyroglobulins (proteins which irreversibly denature at 56 C.)	Abnormal gamma G most commonly found
Analytical ultracentrifugation	1) Useful but expensive 2) May not be able to differentiate between 17S of gamma A and 18S of gamma M 3) Cannot distinguish between Fc fragment and light chain (lambda or kappa)
Starch gel and polyacrylamide electrophoresis	Practical value but not generally used at present
Immunoelectrophoresis	Can qualitate easily but quantitation is poor; should be used in conjunction with routine electrophoresis

In patients with marked hypogammaglobulinemia, severe repeated infections should suggest the diagnosis.

In the future, further practical applications of immunoelectrophoresis can be expected. During the past two years, Dr. Charles A. Alford of the Medical College of Alabama has been studying the immunoglobulins of newborn infants. He suggests that early detection of an elevation of either gamma M or gamma A immunoglobulin would be evidence for an inapparent congenital infection, such as rubella, cytomegalovirus or Treponema pallidum.

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References

1. Tiselius, A., and Kabat, E. A.: Electrophoresis of Immune Serum, Science 87:416-417, 1938.
2. Heremans, J. F.: Immunochemical Studies on Protein Pathology. The Immunoglobulin Concept, Clin. Chem. Acta 4:639-646 (Sept.) 1959.
3. Fahey, J. L.: Antibodies and Immunoglobulins. II. Normal Development and Changes in Diseases, J.A.M.A. 194:255-258 (Oct. 18) 1965.
4. Fahey, J. L.: Antibodies and Immunoglobulins. I. Structure and Function, J.A.M.A. 194:71-74 (Oct. 4) 1965.
5. McKelvey, E. M., and Fahey, J. L.: Immunoglobulin Changes in Disease: Quantitation on the Basis of Heavy Polypeptide Chains, J. Clin. Invest. 44:1778-1787 (Nov.) 1965.
6. Coons, A. H., and Kaplan, M. H.: Localization of Antigen in Tissue Cells; Improvements in Method For Detection of Antigen by Means of Fluorescent Antibody, J. Exper. Med. 91:1-13 (Jan.) 1950.
7. Bach, F., and Hirschhorn, K.: Gamma-globulin Production by Human Lymphocytes in Vitro, Exp. Cell Res. 32:592-595 (Dec.) 1963.
8. Alper, C.; Rosen, F., and Janeway, C.: The Gamma Globulins H. Hypergammaglobulinemia, New England J. Med. 275:591-596, 1966.
9. Alper, C.; Rosen, F., and Janeway, C.: The Gamma Globul s II. Hypergammaglobulinemia (concluded), New Eng nd J. Med. 275:652-659, 1966.
10. Gitlin, D.: Hypogammaglobulinemia, Disease a Month (May) 1962.
11. Hong, R., and Good, R. A.: Limited Heterogencity of Gam-

ma Globulin in Hypogammaglobulinemia, Science 156:1102-1103, 1967.
12. Nerenberg, S. T.: Electrophoresis, Philadelphia, F. A. Davis Company, 1966. pp. 82-96, 169-172, 184-218.
13. Pelkonen, R.; Siurala, M., and Vuopio, P.: Inherited Agammaglobulinemia with Malabsorption and Marked Alterations in the Gastrointestinal Mucosa, Acta Med. Scandinav. 173:549-555 (May) 1963.
14. Peterson, R. D.; Cooper, M.D., and Good, R. A.: The Pathogenesis of Immunologic Deficiency Diseases, Am. J. Med. 38:579-604 (Apr.) 1965.
15. Waldenstrom, J.: Clinical Diagnosis and Biochemical Findings in Material of 296 Sera M-type, marrow (gamma 2) globulins, Acta Med. Scandinav. 170: (Supp 376) 110-119, 1961.
16. Waldenstrom, J.: Incipient Myelomatosis of "Essential" Hyperglobulinemia with Fibrinogenopenia—New Syndrome ?, Acta Med. Scandinav. 117:216-247, 1944.
17. Rappaport, H.: Tumors of the Hematopoietic System, Atlas of Tumor Pathology, Armed Forces Institute of Patbology, 1967, Section III, Fasicle 8:207-237.
18. Osserman, E. F., and Takatsuki, K.: Plasma Cell Myeloma: Gammaglobulin Syntbesis and Structure, Medicine 42:357-384 (Nov.) 1963.
19. Hallen, J.: Frequency of "Abnormal" Serum Globulins (M-components) in Aged, Acta Med. Scandinav. 173:737-744 (June) 1963.
20. Cummings, N. A., and Franklin, E. E.: Atypical Gamma-1-A-Globulin With the Electrophoretic Properties of an Alpha-2-Globulin Occurring in Multiple Myeloma, J. Lab. Clin. Med. 65:8-17 (Jan.) 1965.
21. Vaerman, J. P.; Johnson, L. B.; Mandy, W., and Fudenberg, H. H.: Multiple Myeloma with Two Paraprotein Peaks: An Instructive Case, J. Lab. Clin. Med. 65:18-25 (Jan.) 1965.

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editorial comment

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Because of the complexity and vast numbers of human serum proteins, many methods have been devised to characterize them. New techniques of demonstrating individual proteins and groups of proteins are constantly being introduced, but few of these achieve clinical practicality.

Immunoelectrophoresis is a practical method recently having become available that has allowed characterization of a number of newly recognized entities and has clarified our concepts of others. I am sure that more clinically useful information will evolve as a result of this methodology.

Dr. Willey's presentation is a useful summary of the present status of immunoelectrophoresis. Because of the rapidity of advances, it will no doubt be somewhat outdated by the time of publication, but this article can be helpful in giving a firm foundation from which to follow developments.

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Capsules on Fever

Eugene Sanders, M.D.

The following article was inspired by Dr. Leighton Cluff's "Capsules on Infectious Diseases" which appeared in the September 1968 issue of the Journal. The author has indicated his willingness to be open to direct query by readers.—Ed.

The graphic recording of the patient's temperature has been practiced in English-speaking countries for almost a century. The nature of this recording may provide useful clues in diagnosis and management of a variety of diseases. However, since the advent of potent antipyretics and antimicrobial drugs, there has been a tendency to overlook the value of such a record, even though it is still diligently obtained. The purpose of the following capsules is to highlight the value of the graphic record and other signs associated with fever. It should be emphasized, however, that these signs are of no more or less value than other components of a thorough case history, physical examination, and laboratory evaluation of the patient.

Physiologic Variations in Temperature

There is a normal diurnal fluctuation in body temperature. The extent of this variation is often as great as one degree Fahrenheit (1 F). Highest readings are obtained from 4-6 p.m., and the lowest from 4-6 a.m. This pattern may, but does not invariably, reverse in individuals such as night-watchmen, who are active by night and sleep by day. Rises of 1 F above the norm may be anticipated (1) following digestion of a large meal, (2) during the menses, (3) in the first trimester of pregnancy, (4) at ovulation, and (5) during exposure to a warm environment (above 85 F). A physiologic rise of more than 1 F may be anticipated following vigorous exercise.

Patterns of Fever as Clues in Diagnosis

Sustained Fever.—In continuous or sustained fever, temperature is elevated throughout each day with fluctuations of less than 1-2 F. This pattern is commonly encountered in (1) pneumococcal pneumonia, (2) drug fever, (3) scarlet fever, (4) typhoid and paratyphoid, and (5) rickettsial infections.

Remittent Fever.—In remittent fever, there are wide variations during the day but the temperature does not return to the baseline. The fluctuations may accentuate the normal diurnal pattern, as seen in primary atypical (Eaton agent) pneumonia; or may reverse the diurnal pattern, as occasionally noted in tuberculosis or bacteremia due to Salmonellae. Remittent fever is also observed in (1) subacute bacterial endocarditis, (2) acute rheumatic fever, (3) rheumatoid arthritis, (4) acute brucellosis, and (5) murine typhus.

Intermittent Fever.—This pattern is characterized by daily spikes in temperature with return to normal in the interval between elevations. When two spikes occur daily, the eponym "Double quotidian fever of Notnagle" may be applied. Use of this eponym would indicate that the attending physician has mastered the art of "roundsmanship" and suspects that the patient is suffering from (1) the intermittent administration of antipyretics for a sustained fever, (2) disseminated tuberculosis, (3) gonococcal endocarditis, (4) quartian malaria, or (5) kala-azar. When intermittent or remittent fevers show exceptionally wide daily variations, one should suspect the presence of a suppurative pyogenic infection with obstruction to drainage.

Relapsing Fever.—This pattern is characterized by bouts of fever lasting several days, alternating with periods of normal temperature. Relapsing fever is typical of (1) ascending cholangitis with intermittent or incomplete biliary obstruction, (2) chronic meningococcemia, (3) malaria, (4) rat-bite fever, or (5) infection with the *Borrelia* group of microorganisms. The Pel-Ebstein fever of Hodgkin's disease is characteristically relapsing; however, other patterns of fever occur more commonly in this disease. Pel-Ebstein fever, when encountered, strongly suggests that the disease is widely disseminated or that extensive involvement of para-aortic and mediastinal lymph nodes is present.

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Height of Fever

Excessively High Fever.—Fever of 106 F or more in adults suggests (1) Gram-negative bacteremia, (2) tuberculosis, (3) typhoid, (4) acute brucellosis, (5) malaria, (6) subarachnoid hemorrhage, or (7) acute hemorrhagic pancreatitis. Pre-school children may have higher fever with a given disease than infants or adults.

Absence of Fever with Infection.—Fever may be absent in each of the following: (1) infancy, (2) the aged, (3) extreme debility, (4) botulism, (5) tetanus, and (6) staphylococcal food poisoning. Diphtheria may be associated with only low-grade fever, except in overwhelming infection.

Acute Myocardial Infarction. — Fever above 101 F due to acute myocardial infarction indicates an exceedingly poor prognosis.

Duration of Fever and Its Response to Specific Antimicrobial Therapy

Fever of greater than 7-10 days duration is never due to acute benign viral illness, such as exanthems, influenza, mumps, coxsackie, adenoviral, rhinoviral, and enteroviral infections.

Fever lasting more than 10-14 days in presumed viral hepatitis suggests an error in diagnosis or presence of a complication such as continuing subacute hepatic necrosis. Elevated temperature in both viral hepatitis and leptospirosis (Weil's disease) usually disappears with the onset of clinical jaundice.

Fever of greater than three weeks' duration is usually due to causes other than infection. Malignancy or collagen vascular disease is most ferquently implicated.

Prompt defervesence of fever occurs in appropriately treated pneumococcal pneumonia of less than 24 hours' duration and meningococcemia. The fever associated with inflammation of an extremity may fall rapidly when the affected limb is immobilized.

Delayed defervesence following appropriate treatment occurs in (1) pneumococcal pneumonia of longer than one day's duration, (2) meningococcal meningitis, (3) typhoid, and (4) tuberculosis. Rate of response of fever in pneumococcal pneumonia correlates closely with the duration of the disease before therapy was instituted. Therapeutic response of fever requires 3-5 days in typhoid and 5-7 days in tuberculosis.

Failure of Fever to Respond to Specific Antimicrobial Therapy

The more common causes of failure of fever to respond to specific antimicrobial therapy when the infecting microorganism is known to be susceptible are enumerated below:

1. Foreign body at the site of infection. Foreign substances that may prevent response to appropriate antibiotic therapy are (a) protheses, (b) indwelling catheters, (c) renal or biliary stones, (d) sequestra in osteomyelitis, or (e) sutures. Other foreign bodies may be introduced with such minor trauma that they are unrecognized by the patient. In general, when the foreign body is removed, prompt defervesence of fever will occur—often in the absence of specific antimicrobial therapy.

2. Suppuration with obstruction to drainage. Prompt response of fever usually follows relief of the obstruction with drainage.

3. Emergence of drug resistance. The emergence of genotypic drug resistance during therapy may account for some instances of failure of fever to respond. Resistance is likely to occur when bacteriostatic (erythromycin, tetracycline, chloramphenicol) or aminoglycoside (streptomycin, neomycin, kanamycin) antibiotics are given for longer than 7-10 days. In addition, resistance develops more readily in chronic infections. Susceptible staphylococci do not develop genotypic resistance to penicillin during therapy with this drug.

4. Antagonism between drugs. Tetracycline and penicillin may be antagonistic when administered simultaneously to patients with meningitis. Other combinations, particularly bacteriostatic with bactericidal drugs, may be antagonistic and should be avoided.

5. Drug fever. (See below)

6. Presence of an underlying disease. Persistence of fever may be due to an antecedent disease, such as malignancy or collagen-vascular disease, that has predisposed the patient to infection.

7. Induction of superinfection. Superinfection with drug-resistant microorganisms may be induced by broad-spectrum antibiotics given in large doses or for prolonged periods. Examples are enterocolitis, due to staphylococci or candida, and thrush.

Fever and Rigors

Single-Chill Diseases.—True rigors, or shaking chills, are initiated by a rapid rise in

temperature of greater than 2 F. Diseases accompanied by sustained fever may be heralded by no more than one shaking chill. Examples are pneumococcal pneumonia and drug fever in a previously sensitized patient.

Multiple-Chill Diseases.—Diseases with intermittent, remittent, or relapsing fevers may be associated with multiple chills. Pneumonia due to staphylococci or *Klebsiella* (in contrast to the pneumococcus) may be accompanied by recurring rigors. One of the more commonly encountered causes of shaking chills is the intermittent, or p.r.n., administration of antipyretics to patients with high sustained fevers.

Chills and Pleurisy.—In a patient with pleurisy, the occurrence of a shaking chill suggests bacterial pneumonia rather than uncomplicated pulmonary infarction.

Chills and Jaundice.—In jaundiced patients, the presence of shaking chills suggests ascending cholangitis and biliary obstruction rather than viral hepatitis.

Fever and Antipyretics

Technique of Lowering Temperature.—There is no contraindication to eradication of fever when the diagnosis is established. Antipyretics should be administered regularly, and not p.r.n. When hyperpyrexia dictates that temperature be lowered immediately, tepid sponging of the extremities is the safest and most effective means. Water should be used in preference to alcohol because evaporation of water extracts more calories than alcohol. Cold water or ice packs should not be used because they may induce peripheral vasoconstriction and elevate body temperature even further.

Hazards of Antipyretics.—The adverse effects of intermittent administration of antipyretics may be (1) repeated chills, (2) hypotension, (3) profound diaphoresis, (4) exhaustion, and (5) fluid and electrolyte imbalance. Antipyretics, even when properly prescribed, may induce the above plus hypothermia in patients with fever due to Hodgkin's disease, disseminated tuberculosis, and typhoid fever.

Failure of Antipyretics to Lower Temperature.—Aspirin frequently fails to reduce temperature in roseola and mumps with orchitis, but it acts promptly in fevers due to other childhood viral infections. The fever of mumps with orchitis usually responds dramatically to corticosteroids. Although corticosteroids induce defervesence of fever in many diseases, they frequently fail in severe staphylococcal infection.

Potpourri
Generalizations and Aphorisms

Fever of undetermined etiology lasting more than three weeks is most commonly due to malignancy or collagen vascular disease. Infections are less common causes; among these granulomatous infections, particularly tuberculosis, are the most frequent. Therapeutic trials of antimicrobial agents in fevers of obscure origin are to be discouraged. Results are more often misleading or hazardous to the patient than beneficial.

Drug fever develops in a stepwise fashion and becomes sustained in the previously unsensitized patient. In the previously sensitized patient, the fever appears earlier and more abruptly and is often accompanied by a chill. Drug fever is sustained unless altered by antipyretics.

The appearance of fever coincides with antibody response in patients with typhoid, tuberculosis, and brucellosis. Diagnostic serologic tests obtained after the appearance of fever will therefore be elevated.

Exacerbations of chronic bronchitis with fever indicate that the patient has pneumonia as well.

Biliary tract obstruction due to tumor, associated with fever and guaiac positive stools, most likely arises from ampullary carcinoma and not malignancy in the head of the pancreas.

Pancreatitis with high fever indicates hemorrhage with peritoneal involvement.

Herpes labialis may accompany fever in pneumonias due to the pneumococcus, staphylococcus, or *Klebsiella,* but not those due to Eaton agent (primary atypical pneumonia). It may also occur in meningococcal meningitis, but not chronic meningococcemia. It is seldom seen in association with typhoid or typhus fevers.

Fever with relative bradycardia is not pathognomonic of typhoid fever. It also may be observed in patients with fever and bile stasis, intrinsic myocardial disease, or meningitis.

Fever and polyneuropathy should suggest a diagnosis of polyarteritis nodosum.

Almost any malignant tumor may be associated with fever, and occasionally rigors, in the absence of infection. The more common are Hodgkin's disease and other lymphomas, hypernephroma, and infratentorial tumors.

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Emergency Treatment of Acute Pulmonary Edema

Philip Samet, M.D.

Acute pulmonary edema is a common event in the life history of the cardiac patient. It is primarily an expression of disease of the left side of the heart and, therefore, is seen primarily in patients with acute myocardial infarction, mitral valve disease, especially mitral stenosis, aortic stenosis, aortic regurgitation, severe hypertension, over-infusion of fluids, and occasionally in patients with tachycardia or pulmonary embolism.

In the previously untreated patient the cornerstones of treatment of acute pulmonary edema are: (1) sedation usually with morphine unless contraindications are present; (2) improvement of myocardial function by digitalization; (3) onset of rapid diuresis with the newer diuretic agents; (4) decreasing venous return and right ventricular output; (5) removal of precipitating and aggravating factors such as rapid arrhythmias, paroxysmal hypertension, arterial hypoxemia, metabolic or respiratory acidosis, and increased work of breathing, and (6) proper positioning of the patient.

These therapeutic measures most often are used simultaneously rather than consecutively especially if pulmonary edema is severe. Formerly discussion often centered about the concept whether morphine or digitalis was the more important form of therapy. The development of the newer diuretic agents, such as ethacrynic acid and furosemide, has added another primary form of treatment for this condition. Generally, all three agents are administered early in the course of therapy for severe pulmonary edema. The patient is also placed in the upright position unless shock is present.

Foundation of Therapy

Morphine is best given slowly intravenously in a dose of 8-10 mg. If necessary, an additional 5-10 mg. may be given later. In very mild cases of pulmonary edema, the drug may be given subcutaneously or intramuscularly. These latter routes should be avoided in severe pulmonary edema with markedly depressed cardiac output since absorption of the drug is often slow and unpredictable under these circumstances. Morphine therapy per se will often terminate the mild case of pulmonary edema. If respiratory depression results from morphine administration, nalorphine hydrochloride (Nalline) should be given intravenously in 5 mg. doses which may be repeated once or twice at 20-30 minute intervals.

Morphine should be avoided in patients with known chronic pulmonary disease, especially if arterial carbon dioxide tension is over 45-48 mm. Hg. Pulmonary edema in patients with cerebrovascular trauma or accidents should also be treated without morphine. Morphine therapy may result in varying degrees of hypotension which may in turn require therapy. Some cardiologists advocate atropine (0.4-0.5 mg. intravenously) if tachycardia is not a problem but this observer has not been impressed with its value.

Stimulation of myocardial contractility by digitalis is a second foundation of therapy. Intravenous therapy is generally advisable. If the situation is extremely grave and if the physician is experienced in the use of Ouabain, 0.5 mg. is given by vein and followed by 0.1 mg. doses every half hour to a maximum of 0.8-1.0 mg. or until clinical improvement is noted. One must be certain that the patient has not been receiving digitalis therapy for at least two and preferably three weeks if intravenous digitalis preparations are employed. Much more frequently Cedilanid or digoxin are utilized for intravenous rapid digitalization. The time of onset of action of these two agents is less than one hour when given intravenously. By promoting myocardial contractility, digitalis agents increase cardiac output and lower left ventricular end-diastolic and left atrial mean

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pressures thereby decreasing pulmonary artery wedge (or capillary) pressures. The dose of Cedilanid is 0.8 mg. intravenously followed by 0.4 mg. in 2-3 hours if necessary. Another 0.4 mg. may be given 4-6 hours later. The total dose of Cedilanid should not exceed 1.6 mg. over an 18-24 hour period. The patient may then be placed on maintenance therapy, generally with digoxin, since maintenance digitalis therapy with Cedilanid, especially oral Cedilanid, is often unsatisfactory. If digoxin is utilized, 1.0 mg. is given intravenously, followed by one or two 0.25 mg. additional doses if needed. Maintenance therapy with oral or intramuscular digoxin may then be employed.

Diuretic Agents

The development of rapidly acting diuretic agents—ethacrynic acid and furosemide—has altered the therapy of acute pulmonary edema. The use of 1-2 ml. of a mercurial diuretic intravenously was formerly advocated, but since the onset of a diuresis was delayed for 4-6 hours, the issue was usually decided before an effective diuresis ensued. However, administration of both ethacrynic acid and furosemide results in much more rapid diuresis. Both agents when given intravenously produce the onset of diuresis within 15-20 minutes. A liter of urine will often be produced within 60-90 minutes. Oral administration produces onset of diuresis within 60-90 minutes. Ethacrynic acid is given in doses of 50-100 mg. intravenously in pulmonary edema. Oral therapy (100 mg.) is less desirable. Furosemide is given in doses of 40-80 mg. intravenously and 80-120 mg. orally. My laboratory studies have revealed a significant decrease in cardiac output (20-25%) at 30-60 minutes after intravenous ethacrynic acid. Pulmonary blood volume falls by 10-15% with the diuresis. A fall in systemic arterial and pulmonary artery pressure may result.

The effect of ethacrynic acid upon blood volume should be mentioned. Red cell mass and plasma volume before and after administration of intravenous digitalis and mercurial diuretics have been measured in this laboratory. Measurements six hours after therapy failed to reveal changes in plasma volume or red cell mass. In contrast, two hours after 100-200 mg. of oral ethacrynic acid, plasma volume had undergone a significant decrease of 10-15%, another reflection of the rapid diuretic effect of this agent. Theophylline derivatives such as aminophylline (0.24-0.48 Gm. intravenously) are advocated by some clinicians but this observer has seen little evidence of a beneficial effect unless severe bronchospasm complicates the picture of pulmonary edema.

Decrease Venous Return

Measures to decrease venous return are employed especially when the approaches previously discussed are not effective or only partially clear the clinical picture. The primary measures in this category include rotating tourniquets and phlebotomy. Rotating tourniquets have been utilized for many years on the theory that blood volume, especially plasma volume, is decreased during tourniquet application. However, studies in this laboratory have clearly shown that neither red cell mass nor plasma volume is decreased by rotating tourniquets; on the other hand, cardiac output is significantly (10-20%) decreased by rotating tourniquets. Phlebotomy is accomplished by removal of 500 ml. blood as rapidly as possible. Inspiratory or expiratory positive pressure breathing is also employed to decrease venous return. Positive pressure throughout the entire respiratory cycle is not utilized because of the marked hypotensive effect. Positive pressure breathing is done with a Bird machine (inspiratory positive pressure) or a metered mask (expiratory pressure). Not only is cardiac output decreased by these measures, but arterial oxygen saturation is improved by use of inhaled gas mixtures containing 40-100% oxygen. Blood pressure must be watched carefully during positive pressure breathing to prevent a hypotensive effect. Surface tension reducing agents such as ethyl alcohol have not been of significant benefit in our hands.

Other measures to decrease venous return, such as spinal anesthesia and stellate ganglion block, have been suggested to decrease venous return, but have seen limited use. Ganglionic blocking and sympatholytic agents such as mecamylamine (1-3 mg. diluted in 50 ml. of 5% glucose in water and given slowly intravenously), hexamethonium, dibenamine, and dihydroergokryptine have been employed but my experience is too limited to permit useful comment. The one situation in which these agents may be useful is in the treatment of pulmonary edema in a patient with severe systemic hypertension.

Precipitating Factors

The last category of therapeutic measures embodies the removal of precipitating factors. These include the correction of arrhythmias with rapid or slow ventricular rates. The former may be treated

with agents such as digitalis, quinidine, Pronestyl, xylocaine and Dilantin. The development of direct current cardioversion techniques constitutes a significant contribution to the treatment of pulmonary edema precipitated by atrial flutter or fibrillation and ventricular tachycardia with rapid ventricular rates. Cardiac pacing techniques may be useful or life-saving in the treatment of slow ventricular rates, especially with complete heart block. Arterial blood gas analysis has become an essential aspect of therapy in patients with pulmonary edema who do not readily respond to treatment.

The commonest acid-base abnormality detected is respiratory alkalosis which does not require specific therapy. Decreased peripheral perfusion due to low cardiac output is often a cause of metabolic acidosis. Correction of such acidosis with sodium bicarbonate (administered intravenously) is frequently essential for a successful response to the basic therapeutic measures since acidosis per se further impairs cardiac function. Respiratory acidosis may also complicate pulmonary edema. Therapy with inspiratory positive pressure breathing is then required.

Uncommonly endotracheal intubation or tracheostomy are required to permit adequate carbon dioxide exchange. Correction of arterial hypoxemia is accomplished by inhalation of high oxygen mixtures and correction of the pulmonary edema. The role of hyperbaric chambers in correction of arterial oxygen unsaturation remains for future study. Surgical correction of aortic and mitral valve disease may be needed to prevent recurrent pulmonary edema.

The final precipitating factors of pulmonary edema that may readily be dealt with involve restriction of activity and prevention of excessive sodium intake either orally or intravenously, i.e., by dietary excess or by ill-advised infusion of sodium chloride containing solutions, or the use of whole blood transfusion instead of the packed red cell transfusion.

Future Promise

Utilization of one of the varied types of assisted circulation such as venoarterial shunting, left heart bypass or counterpulsation offers future promise for the therapy of patients with nonresponsive pulmonary edema, but the value and role of these methods remains for further evaluation. On the other hand, peritoneal dialysis with hypertonic glucose solution offers a more immediately available palliative procedure for selected patients with nonresponsive subacute pulmonary edema.

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Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

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Florida Medical | features

A Return to Law and Order

Marshall M. Criser, LL.B.

Without being a prophet of doom or being the Gabriel Heatter of modern day, I do think that when we attend these important meetings that all the major problems that face us are subjects of proper discussion. There is one that is brought to mind by the fact that just a week ago this country recognized Law Day.

Law Day was instituted by a past president of the American Bar Association some five or six years ago as a recognition of the benefits of our way of government. I believe May first was selected as a counter action to the traditional May Day activities which Communist nations carry on. At no time in our history has the significance of Law Day been more important than it is this year. Four or five years ago to speak about preservation of law and order was like speaking about patriotism or motherhood. It was an established fundamental of our American way of life and nobody had to make speeches about it except possibly on Declaration Day. But now I think that we're in a time when we have to make speeches about it and have to recognize that law and order is not necessarily the rule of the day in our land. Unfortunately our country is in some form of a minor or major revolution in regard to these principles.

If we had discussed the subject of law and order four years ago I think we would probably have approached it on a theoretical rather than on an empirical basis. We would have resorted to history books to discuss it and to make illustration. Today we don't have to resort to history books but only have to look at the morning newspaper to see what's happening in our country.

At the time when the world is trying, albeit unsuccessfully, to find peaceful alternatives to discourage a war for the settlement of international grievances, it is ironic that the model for these efforts, the Constitutional and legal order in domestic affairs, should be renounced and the barbarity of war of civil insurrection introduced into domestic life. The lesson of the most destructive war in our history, the War Between the States brought on by a secession from the Constitutional system, apparently has been forgotten only a short century later.

Due process of law originated when primitive man sat in a circle and allowed one man to speak at a time. From this very basic beginning down through the Magna Carta, the Constitution of the United States and our various state constitutions and from the common law, which is merely the interpretation of law by court decision, we now have due process of law in our country as it is established. Our society therefore has established the rule of law. It is the responsibility of the

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At the time this address was presented, Mr. Criser was president-elect of The Florida Bar.

citizen to obey law and to preserve order. It is the further responsibility of qualified citizens to remove and change the imperfections of law.

The "rule of law" is not synonymous with the status quo. Law must be changed by properly conducted court cases, by legislative reform, by lawful advocacy, by education and by persuasion. The law cannot be changed in the streets. If society is to survive, law reform cannot be brought about by civil insurrection.

The right to express beliefs and opinions is what is guaranteed by the First Amendment. There is no right to violate valid law or to create civil disorder. Freedom to say what one believes and not to do what one wishes is what is guaranteed by the First Amendment. I have a constitutional right to speak out against the war in Vietnam. I have no right, constitutional or otherwise, to illegally avoid the draft, to burn a draft card or to block a military convoy.

A democratic society is in need of compliance by citizens with laws with which they disagree, as it must provide the freedom to criticize and the means to change such laws by the democratic process. High motivation and deep-felt conscience may be, and often are, the moving forces of those who practice civil disobedience. This does not mean that those that disobey laws for baser principles or less altruistic motives should be convicted while those who deliberately disobey laws for better motivated reasons should be acquitted. To make this type of distinction would be to change a nation governed by law to one governed by motivation alone. Indeed, conscience can lead men to good or to evil, assuming society is able to distinguish between conscience and baser motivations. No man or organization may decide whether history will determine that an individual who disobeys a specific valid law at a particular time helped or hurt humanity. Nor need we judge whether those who practice civil disobedience and willingly accept punishment therefore are more responsible and consistently devoted to their principles than those who having violated valid laws seek legal assistance to avoid the consequences of their violations.

It is not, I submit to you, within the proper province of any man to raise the question of whether civil disobedience is the only or the best or the wisest method of persuading the public that a particular law is unjust. The simple question is whether the act involved can reasonably be defended as an exercise of a Constitutional right. If it can, it should be defended; if it cannot, it should not be defended.

The advocacy by learned men of the right to disregard and violate laws found morally unsuitable or personally objectionable has been the spark that has ignited civil riots in this country these past four years. It is the obligation of the responsible citizen to direct moral influence to the preservation of law and order and away from the condescendence of anarchists.

Now we are told that these outbursts of violence are episodic—that they are not truly revolutionary, being but outward manifestations of long smoldering feelings of anger and injustice. However that may be, we all know that mobs do not generate human progress; they retard it. Mobs do not establish rights; they trample them. Mobs do not inspire the advancement of civilization; they prohibit it.

You note in newspapers in the past week that the administration offices of two of our great universities, Boston University and Columbia University, were pillaged. They were broken into and they were defaced. The property in them was destroyed. University personnel were held under false imprisonment. The insurgents refused to turn over buildings to lawful authority. Some of their professors and even one of their presidents stated the opinion that their demands were reasonable. Whether or not the demands were reasonable seems not to be the issue. To say the least, the approach, the forum, the means of calling the attention of the administration to the grievances were barbaric and indefensible under any circumstances.

These are great institutions of higher learning. They produce future leadership for our country. May these students now conclude that when employed they may corner their employer in his office and intimidate him into some favorable decision? If they become members of one of the trade unions of our country, may they conclude that they may put the "muscle" on union leaders so that their demands will be acceded to? And yes, as they become citizens of our communities, may they further conclude that force and intimidation against constituted authority will be successful? On the contrary, did the administrative officials involved in these cases, as have so many other persons in public and private position of responsibility, merely succumb to their own fear

and inadequacy to deal with a very difficult situation? In fact is not our entire permissiveness to civil disobedience now based on an over-reaction founded in fear? What are the consequences of the course that we appear to have adopted? If public employees continue in massive disobedience to lawful legislation, if movements for civil rights causes continue to practice disregard of lawful court injunctions and orders, if looting and arson tend to be beyond the power of the police to abate and if in public and private dealings contracts and moral obligations no longer have binding force, what is the fate of this democratic society at one time held up to be the model to which the rest of the world should aspire? These are the questions we need to be asking ourselves. We need to jog our memories about the basics of our system of government and remind ourselves that with rights go responsibilities and that when we talk about rights we have also to talk about duties. We've got to be willing to stand up and be counted, to tell the university student that his rights include the right to express himself and to speak out for the things in which he believes, but the same time he has a duty to conduct himself in a lawful manner in expressing those beliefs. We have a responsibility to let the 12-year-old ghetto dweller know that when the brick goes through the department store window and he steals, such conduct cannot be tolerated. No, the 12-year-old ghetto dweller shouldn't be shot for stealing a radio or TV set; however, if that child at some point is not made aware of the fact that while he won't be shot he will receive a just and fitting punishment under the circumstances, what possible hope is there that he will not continue his pillaging and looting for the rest of his life?

Kingman Brewster, president of Yale University, recently stated that his students may elect to burn their draft cards but having done so they must be prepared to accept the punishment that lawful authority should and will impose. Comparable statements have been made recently by Dean Griswold, the former dean of Harvard Law School who now is the Solicitor General of the United States, and by Mr. Morris, the president of the American Bar Association. Unfortunately, in my judgment, the Attorney General of the United States has not seen fit to make a similar statement pointing out to people that if they assume the right to break the law then they also must assume that society will impose the proper punishment for that breaking of the law.

If we resort to history we find that in centuries past in European, South American and Asiatic countries governments have been overthrown, presidents and kings beheaded and law and order demolished when the people took to the streets. Our present government may be full of imperfections, but if it is to be changed or replaced it must be altered through public persuasion and education and through the use of the ballot box. It cannot be redesigned in the streets. Mobism is the antithesis of civilization—a dire step backward precipitously and fiercely undoing in a few wild hours the forward movement of generations. Mob violence and destruction can be tolerated by no nation that counts itself civilized, much less by a nation that has had thrust upon it by the forces of history a sobering burden of leadership among the family of nations. Somehow, some way, we must instill in Americans a clear conception of what the law really does mean to them. We must make them understand that the law belongs in a very real sense to the individual, not to lawyers and judges, not to the courts, but to every American citizen. The law is something to be cherished and not feared.

One hundred years ago, commenting on the problems of that day, Abraham Lincoln made the following statement:

> Let reverence for the law be breathed by every American mother to the lisping babe that prattles on her lap. Let it be taught in schools, in seminaries and in colleges. Let it be written in primers, spelling books and almanacs. Let it be preached from the pulpit, proclaimed in legislative halls and enforced in courts of justice, and in short let it become the political religion of the nation. Let the old and the young, the rich and the poor, the grave and the gay, of all sexes and colors and conditions sacrifice unceasingly upon its altar.

Let 1968 be remembered by history as the year the United States turned from the brink of the lawless jungle and returned to the pinnacle as the greatest free society devised by man. I encourage you as leaders of your profession, more importantly as leaders of your communities and of your state, to be among those who stand up and let your fellow citizen know that disrespect and disregard for law and order cannot be tolerated in our society; that no matter how well motivated people may be that we have reached a time of potential explosion in our nation and that we're going to have to take a realistic approach to the problems of the day; that through a return to law and order and a return to the constitutional system lies the only vehicle under which this great nation can continue to prosper. □

A Need to Plan

Dwight L. Wilbur, M.D.

It seemed to me appropriate to discuss with you what I think is the most important problem facing us as physicians and as medical associations and this has to do with what I will call "a need to plan." As we look back on the past 25 years we must recognize that without any question there will be striking changes in medicine in this country in the next 10 to 15 to 25 years. It behooves us as members of our respective medical associations to give consideration as to the role that we will play as individuals and as members of these associations in making the plans for the changes that are ahead.

Look back for a moment to the time at the end of World War II about 25 years ago. There were then essentially no antibiotics, no corticosteroids, none of the modern tranquilizing drugs, almost no cardiovascular surgery and, in terms of economics of health care, there was just the beginning of voluntary health insurance. There were grumblings about compulsory health care financed by government and there were very few third parties in the physician-patient relationship.

Now what have we as a profession learned during the past 25 years about these changes? What have we in particular learned about or experienced with the 89th Congress? What does the future hold? How will we influence it? Clearly three factors stand out. The changes will come first, with increasing knowledge in the science of medicine, which will be the fruit of research and of clinical investigation. Second, there will be striking changes in the organization and delivery of medical and health care. Voluntary health insurance will increase, government financing will grow and there will be further developments in the specialization of medicine and in group practice. There will be a need for more health manpower, increasing demands for health care, more extensive use of hospitals, particularly of their special facilities such as emergency rooms and laboratories, and other sophisticated activities. The government clearly will push for prepaid closed panel systems of group practice with comprehensive and continuing care with lay domination and physicians on salary. Third, and most important, we now have a national commitment to health and health care, a phenomenon of the 1960's. Consider the 89th Congress which produced Medicare, Medicaid, the Regional Medical Programs, the Comprehensive Health Planning and Partnership for Health Amendments. Consider such statements as, "Health care is the right of every individual. There should be a personal physician for every patient. There should be main stream medicine for all. Health care and health are a public responsibility. Local initiative and local control are to be emphasized. There is to be no interference with the existing patterns of health care." Surely the federal government is going to increasingly finance medical research, medical education and medical service.

Where do we in the medical profession stand?

Let me pose some questions. Who is going to do the planning for health in the future? Who is going to make the inevitable changes that I have mentioned? Who is going to make the decisions? Will it be experts and others in the field of public health? The Congress? The executive branch of government through H.E.W.? The state and local departments of public health? The unions? The public? Or are we in the medical profession to make them? What kind of partnership are we going to have with the government? Who is going to give the leadership?

Basically, public opinion is the most powerful determinant and the ultimate force which in the long run will determine the social, economic and political course of this country; it will decisively determine future patterns of health care. Who and what will shape and influence public opinion? What will be the role of the individual physician and of local and state medical associations and the AMA? What are we going to do about planning the future? Are we going to take an effective part in cooperating with government and with others with special interest in the field of health or are we by default going to bow out and let others do it and continue to react and to reject what government, labor and others do in attempting to socialize medicine? Are we going to preserve the best in the private practice of medicine? The physician-patient relationship? Free choice of hospitals and physicians? Fee for service and

Presented at the Florida Medical Association 94th Annual Meeting, May 9-12, 1968, Hollywood.
At the time of this presentation Dr. Wilbur was president-elect of the American Medical Association.

other principles in which we so strongly believe and hold to be so important?

It is essential for the AMA, state and local medical associations to plan for the future. What are these associations for? Our constitutions say "to advance the science and art of medicine and the betterment of public health." We understand the first of these but what do we really mean by "the betterment of public health"? We must not only develop a clear understanding of what should be the scope and responsibility of medicine in the new era of health care, but we also must establish the purpose and the goals of our societies and of medicine. We then must develop the accurate facts and dependable information to lead constructively. We must change our attitude about our involvement with government and with others in health care. We are involved. Knowledge of facts and expertise are the strongest assets of medicine. We must no longer play a passive role and just oppose what we think is bad.

This is not a new role for physicians accustomed to making a diagnosis of a problem by taking a history, by making a careful physical examination and then by proceeding to strengthen what is weak and repair what is defective in the patient in a positive way. In the long run, our advice, carefully considered and given, will be successful only if it has the support of public opinion just as any advice from a physician is likely to be followed only if the patient has confidence in the physician and thinks it is good advice.

The Board of Trustees of the AMA has recently established a Committee on Planning and Development and this committee and the Board are giving serious consideration to some of the problems which I have posed and the questions which I have identified. I believe that every state and local medical society should have a similar committee of its most effective, intelligent and experienced members to plan—to plan basically for the ideal that every American has high quality of medical and health care.

Our strengths are many, but they will be of very little use if we do not plan and lead as only those of us in the medical profession can. We are as sophisticated, as educated and as intelligent as any group in the country. This gives me great hope that we really can be effective and effectively plan for the future of our profession and our medical societies and for the health care of the American people. But we must individually and collectively plan. We must not fail. □

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Florida Medical editorial

Quo Vadis—Organized Medicine

Clyde M. Collins, M.D.

On the premise that health care, along with food, clothing and shelter, are primary needs and that the medical profession should be expected to provide adequate care to all individuals, the Division of Ambulatory Medicine and Community Programs in the Department of Medicine of the University of Florida College of Medicine at Gainesville has proposed a program to provide health care on an outpatient basis to a rural area which has been unable to support a private practitioner for years.

The proposal's prologue states that specialization has produced fragmentation of health care which, to become available to all, demands a change in delivery and can be improved only if its study is approached methodically and with no preconceptions. Further, the report states that as the present practice of medicine emphasizes one patient seeking the services of one physician, this system is now unable to meet today's health needs, and the preservation of the present doctor-patient relationship on an individual basis is incompatible with the delivery of health care in many areas.

A community health program to begin the first of the year is planned to evaluate and investigate health care and needs in a rural area by establishing a model system for Lafayette County in north central Florida. By providing around-the-clock medical service to the local population, it is designed as a practical teaching vehicle for students of the colleges of medicine and nursing as well as serving as a laboratory for research projects. The program, incidentally, is under current review by two councils of the FMA.

This area contains 3,000 people with a single city, Mayo, having approximately 1,000 persons. The major industry is farming, complemented by a small boat-building factory and a larger pulp mill. Many of the residents are indigent or near indigent and many are semi-abandoned elderly people. In the county seat is a recently constructed health clinic. The citizens there have indicated their willingness to have the university initiate such an ambulatory service. Financing the program will be anticipated funds from state and federal agencies as well as local fees for service. This area is closely rimmed by three cities which support less than 10 doctors. These doctors have been approached by the university on this project and are somewhat divided in their reactions. The program will be in competition with these doctors but, because of the indigency of the area, it should have little financial impact on them.

For years doctors have moved in, attempted to build a practice, and inevitably moved on because of a lack of cultural, educational or medical facilities. Without a bona fide private practitioner in this area, it would appear that the social and economic aspect of the practice of medicine will be artificially presented and not realistically appreciated by the student. Doctors who have practiced there state that they only see insignificant diseases while the seriously ill and more affluent people go out of town for medical care.

Among the many problems posed, there appear two uppermost: that of providing medical service to the area and that of training students. The former appears to be the responsibility of organized medicine, while the latter, that of the medical school. If either organization is derelict in its accountability, it would appear that the other should lend assistance. Not by pre-empting the prerogative of one, but by comprehensive discourse and interplanning among all parties on the many facets of the problem and by using personnel and facilities of everyone involved, may the project become successful.

It is obvious that the private practice of medicine in Florida has failed to provide continuing available comprehensive health care for this area.

At the crossroads at Mayo, which course will we take?

From the Editor

Franz Stewart

Cover Girls

He was monitored, defibrillated, anticoagulated, electroconverted, digitalized, and ambulated. He survived!

He was staunch and came of good stock, but early one morning in that lonely predawn dark, felt even in a well lit coronary care unit, he was disturbed. Ventricular prematures were increasing, excitement increased, good sedation seemed to increase agitation. She came in quietly, said nothing, took his hand, and must have made some sound, but I couldn't hear it. He relaxed his arms and legs, began breathing quietly and in seconds was asleep. He survived! His wife administered this therapy. He was loved.

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Many episodes in the course of chronic ischemic heart disease can cause death unless corrected, and cause no permanent damage if quickly controlled. The circumstances likely to produce these complications can usually be recognized and the individual be cared for in a place where devices to recognize arrhythmias and many other parameters of danger to life can be recognized and treated. The use of these impressive instruments, the necessary discipline of a unit, the specificity of treatments to be used, can all capture the physician or nurse and mesmerize him into automatic mediocrity. It is so easy to look intently into the machine and not see beyond it. The patient can be monitored, electroconverted, but never treated or understood.

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Southern Medical Association

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Now comes another president from Florida! How does one congratulate a respected colleague and valued friend except by saying we are glad, and we hope you are glad, Donald Marion.

General Practice

The Eighth James Mackenzie Lecture was delivered before the College of General Practitioners, London, by Annis Gilllie in 1961. This "man of compassion," "the ceaseless inquirer" wrote to a young correspondent, "your faith in Hypod: inj of Strych: is quite as superstitious as the old woman believing in a personal devil—there is as little evidence in the favouring of the one superstition as the other."

Sir James Mackenzie was the father of mechanically recorded cardiology. This educationist was discussing a particular patient with a group of physicians. Asked when he was called in consultation, Mackenzie remarked in surprise, "I was never called in; I was the family doctor."

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General Practice
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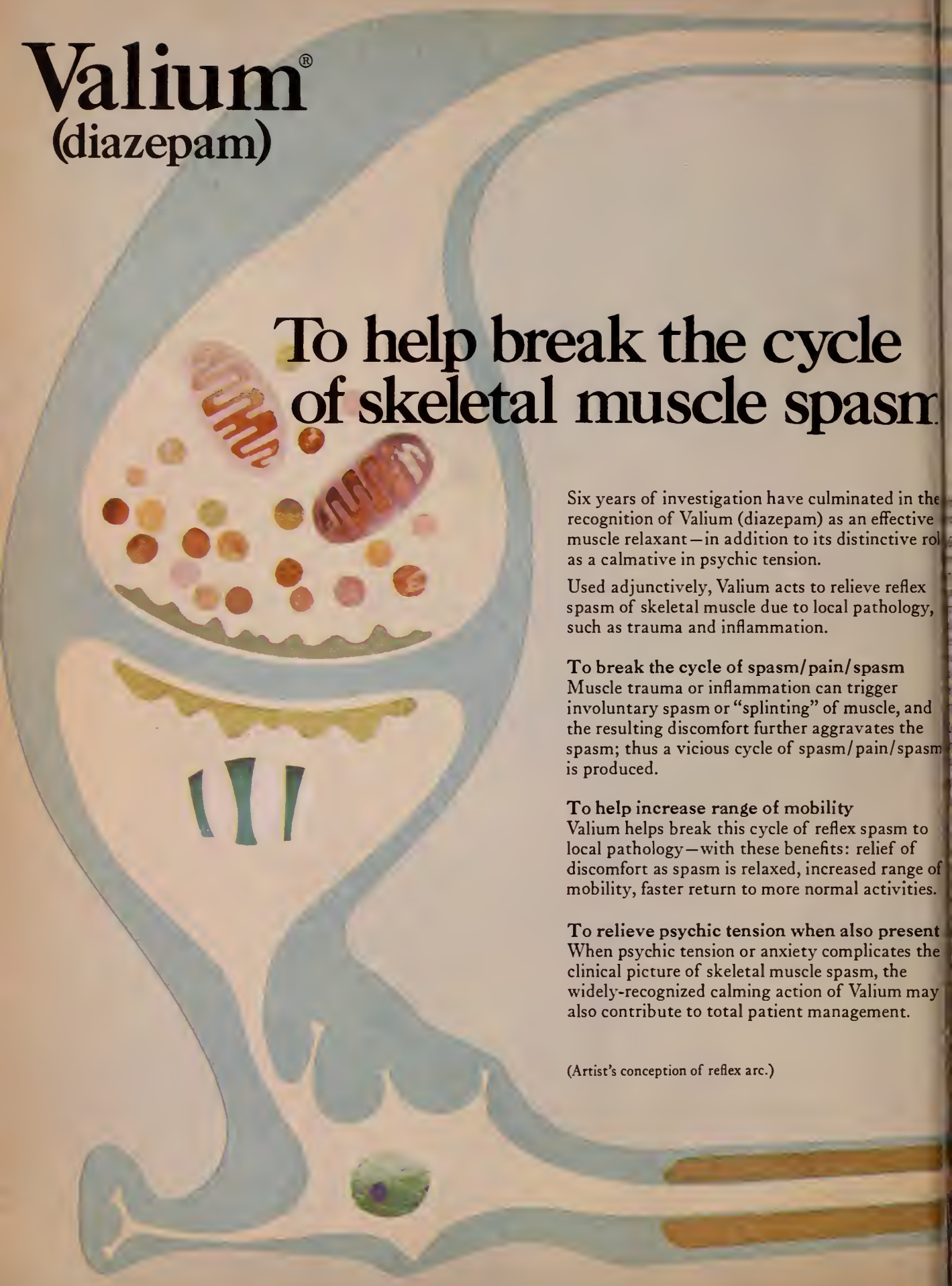
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(Artist's conception of reflex arc.)



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ron disorders, athetosis, stiff-man syndrome,
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g. Children under 6 months of age. Acute
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arnings: Not of value in psychotic patients.
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quency and/or severity of grand mal seizures
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ivulsant medication; abrupt withdrawal may
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d/or severity of seizures. Advise against
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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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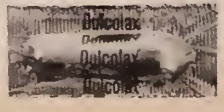
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Florida Medical comment

Our Mail

Tribute for Young Artist

Dear Franz:

Congratulations on the excellent job as Editor of the JOURNAL.

I look forward to the cover design, as well as the contents, each month.

Your choice of Martha Grove's design was a happy one. I am writing to her as well.

EVELYN CLEVELAND (MRS. JACK Q.)
CORAL GABLES

Political Highlights

Dear Editor:

I enjoyed the recent articles by Dr. Bill Welch of Miami on some of the highlights of the recent political conventions.

I would suggest more of the same for the JOURNAL in the future. Florida physicians can profit by the experiences of other areas.

Dr. Welch has contributed significant services in this direction.

PAUL E. DEMICK, M.D.
DELRAY BEACH

Impressed

Dear Dr. Stewart:

Senator-elect Gurney is presently taking a short vacation after his campaign; however, before leaving, he asked me to thank you for sending him the November issue of the Florida Medical Journal.

He found it very interesting, and like you, was quite impressed with the cover.

With all kindest regards.

LOIS D. ELLIOTT
EXECUTIVE SECRETARY TO
CONGRESSMAN EDWARD GURNEY
WASHINGTON, D. C.

Thank You

Dear Dr. Stewart:

This is just a short note to thank you for your thoughtfulness in sending me the medical association journal.

Although the outcome of the election was disappointing, I plan now to spend more time doing some of the things, such as reading and relaxing, that I have been unable to do these many months.

I am looking forward to glancing through the JOURNAL and, I agree, the young artist is unusually creative.

With appreciation and warmest regards.

LEROY COLLINS
TAMPA

Congratulations

Dear Dr. Welch:

I wish to congratulate you on the excellent articles that you wrote in the October and November 1968 issues of the JOURNAL relative to your experiences at the national political conventions held recently.

I heartily agree with you that a liaison between the medical profession and the active political scene is good public relations. This would encourage healthy relationships between the politic and the medics and in this way clear and improve many of the health problems that exist in our nation today.

WILLIAM WICKMAN, M.D.
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Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore, it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics—has resulted in dependence or habituation. Withdraw gradually after prolonged excessive dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance, with resultant slowed reactions and impaired judgment and coordination. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, patients should not operate machinery or drive. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously and in small amounts to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with gastric lavage and appropriate symptomatic therapy (CNS stimulants and pressor amines as indicated). Two instances of accidental or intentional significant overdosage with ethoheptazine and aspirin have been reported. These were accompanied by CNS depression (drowsiness and lightheadedness) but resulted in uneventful recovery. On basis of pharmacologic data, CNS stimulation could be anticipated, with nausea, vomiting and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]).

Adverse Reactions: Ethoheptazine and aspirin may cause nausea with or without vomiting and epigastric distress, in a small percentage of patients. Dizziness is rare at recommended dosage. Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses. Such patients may have had no previous contact with meprobamate and may or may not have an allergic history. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, discontinue meprobamate; do not reinstitute. Severe reactions, observed very rarely, include fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. These cases should be treated symptomatically including, when indicated, such medication as epinephrine, antihistamine and possibly hydrocortisone. A few cases of leukopenia, usually transient, have been reported on continuous use. Rarely, aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported, almost always in presence of known toxic agents.

Overdosage: See precautions section for management of overdosage.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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Florida Medical book review

X-Ray Diagnosis of Congenital Cardiac Disease. By Larry P. Elliott, M.D. and Gerold L. Schiebler, M.D. Pp. 240. Price $11.50. Springfield, Ill., Charles C. Thomas, Publisher, 1968.

Tbis is an exceptional book written by exceptional physicians. Altbougb entitled "X-Ray Diagnosis of Congenital Cardiac Disease," it is an excellent distillation of practical information about the diagnosis of congenital heart disease. Included are lucid and succinct discussions on cardiac anatomy, physiology, physical diagnosis, electrocardiography and vector cardiography, phonocardiography and angiocardiography.

Dr. Elliott, professor of radiology, and Dr. Schiebler, professor of pediatrics, at the University of Florida College of Medicine, have combined their excellence in teaching and organization in a presentation which helps the reader develop a systematic approacb to interpretation of the chest x-ray of patients with congenital heart disease. This approach can produce astonisbing results for some pbysicians and students wbo have a real interest in congenital heart disease but who have not yet developed a system of their own. The x-ray diagnostic approach involves two major facets: (1) hemodynamic or functional considerations whicb stress the evaluation of the pulmonary vasculature prior to analyzing any cardiac structure, and (2) a specific stepwise analysis of certain structures.

Tbe beginning student as well as the experienced radiologist or cardiologist will benefit by reviewing tbe detailed introductory cbapter. Reproductions of the roentgenograms and angiocardiograms are of unusually good quality. Tbe fundamental importance of pulmonary vasculature cbanges in differentiating shunt lesions and lesions associated witb pulmonary venous obstruction is well illustrated.

Otber chapters, well organized and illustrated, include discussions of sbunt lesions, obstructive malformations, cyanotic conditions, cardiac malpositions, and a final brief summary on differential diagnosis.

The enjoyment of this book is added to by Al Capp's touching up of a cbest film of a "Sbmoo"-sbaped beart (of left ventricular enlargement) with apt Sbmoo features. Also, tbe authors point out how the silbouette of the beart in Tetralogy of Fallot resembles that of a golf club, the number one wood or driver, at a certain angle, courtesy of Dr. E. J. Andrews Jr. while a fourth year medical student at the University of Florida. Tbis updates the traditional use of the "wooden shoe" or "coeur en sabot" to describe the heart contour in Tetralogy of Fallot.

Most book reviews end by recommending that the book be placed in the library of all students and physicians interested in tbe particular subject covered by tbe book. Tbis reviewer can concur with these usual remarks but, more important, it is recommended that this unusual book by Drs. Elliott and Schiebler be "chained" to tbe x-ray view box in tbe clinic or office wherever physicians are interested in continuing to learn more about congenital beart disease.

Jack W. Fleming, M.D.
Pensacola

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The Sword was Turned Upon the Commissioner

E. Jackson Boggs, LL.B.

Once upon a time, Congress created a sword. The sword is found in Section 7701(a) of the Internal Revenue Code of 1954, which provides in part that "the term 'corporation' includes associations . . .". The sword was actually created a long time ago with enactment of the Revenue Act of 1894. It was then retained in the Revenue Act of 1918, and again presented itself in its same mighty form in the Internal Revenue Codes of 1939 and 1954.

First to seize the sword was the commissioner of Internal Revenue, and he found it to be a powerful weapon. How many times he gained a victory short of court battle, we do not know. We do know that as early as the middle 1930's some taxpayers fought back and shielded their way into the courts, but their shields were no match for the mighty sword.[1] In one case the commissioner used the sword against three practicing physicians who had formed a trust called "The Pelton Clinic." The court held, contrary to the contention of the physicians, that the clinic more nearly resembled a corporation than a trust and therefore was to be taxed as a corporation. On some occasions the shields thrown up by the taxpayers robbed the sword of victory, but the occasions were few in number.[2]

In each of the cases, the commissioner said to his victims or intended victims, "Even though you are not a corporation under state law, the sword which Congress created gives me the right under the facts of your case to tax you as a corporation and therefore so shall you be taxed!" The taxpayer in each case cried, "No, I am not incorporated under state law, do not want to be, and should not be taxed as a corporation." As previously mentioned, such cries were usually in vain.

Mr. Boggs is a member of the Tampa law firm of Fowler, White, Collins, Gillen, Humkey and Trenam.

Sword Turned

Then, one day a strange thing happened. Certain professional persons, who could not incorporate under state law, realized that they might be able to make good use of the same sword theretofore used so successfully by the commissioner. The taxpayers, Dr. Kintner and his associates, determined in 1948 that under the facts of their case and the circumstances of the times they would like to be taxed as a corporation.

Why would one desire this? There are many nontax reasons, but among those relating to federal taxes are that the professional man as a corporate employee may participate, along with the other employees, in tax-deferred retirement, profit-sharing or pension plans, in deductible group term life insurance and group medical coverage, in limited tax-free "sick pay" plans and in plans whereby their estates or widows receive limited tax-free death benefits. It should also be noted that prior to 1938 the income tax law did not provide for tax-deferred retirement, profit-sharing and pension plans, and it was not until 1942 that the individual graduated rates similar to those in effect today were enacted into law. To be taxed as a corporation after 1938, or certainly after 1942, thus could become advantageous.

Kintner, therefore, seized the sword and turned it upon the commissioner, saying to him, "With this sword and under the facts of our operation, we are to be taxed as a corporation." Astounded that a taxpayer would attempt to use the sword which previously had been used so successfully by him, the commissioner fought back vigorously. But, he found that *his* shield was no better than the shields which he, the commissioner, had previously battered and beaten to oblivion against

the taxpayers. Thus, Kintner won a smashing victory! The courts decreed and held that he and his associates were to be taxed as a corporation. This is what they wanted; not what the commissioner wanted for them.[3]

Sword Little Used

Strangely enough, during the period from 1954, when Kintner won his victory in the appellate court, until 1967, only two professional groups used the sword to battle their way into the courts, although both groups were successful.[4] One principal reason for the court inactivity from 1954 to 1967, in spite of the fact that the sword was having unilateral success, probably relates to the tremendously successful psychological warfare tactics employed by the commissioner. The tactics, in retrospect, appear to have been designed only as dilatory measures, but they were obviously quite successful to that end.

Thus, in late 1959, when many taxpayers probably were ready to do battle with the mighty sword, the commissioner in effect announced "Wait! I am going to publish some new regulations which will spell out the use of the sword in detail."[5] Wanting to avoid war in the courts if possible, many taxpayers waited for the regulations, which they thought might "show them the way." To the extent that professional men were waiting for guidance from their government, they waited in vain. For approximately one year later, on Nov. 15, 1960, the commissioner published the anxiously waited-for regulations.[6] They were complicated and filled with legal jargon, but in essence said one thing—professional men cannot and must not be allowed to win with the sword.

The commissioner's 1960 regulations noted that the Internal Revenue Code establishes the tests or standards for determining corporate status. But, said the regulations obviously realizing that at that time professional men were not allowed to incorporate under state law, local law governs in determining if the tests are met. Prior to that time the regulations under Section 7701 had stated that "local law is of no importance in this connection." The about-face by the commissioner undoubtedly seemed by him at the time a good defensive measure, but in fact, it merely caused the states to soon implement the professional taxpayer in his use of the already powerful sword (if in fact it did not pave the way for the creation of a new sword). Thus, many states passed laws which said that professional men could in fact incorporate their professional businesses under state law. If local law controlled, the commissioner would surely go down to defeat in these states. The commissioner was not about to concede defeat, however, and on May 8, 1963 he announced that new regulations concerning the new state professional service corporation laws would be issued.[7] Not so many taxpayers were lulled into nonaction this time, but the tactics of the commissioner continued to work as a dilatory measure, at least against some.

Sword More Popular

On Feb. 2, 1965, the new set of regulations in the form of basic amendments to the 1960 regulations were finally issued. These new regulations in effect simply said again that the sword would not work when used by professional persons, regardless of the fact of incorporation under state law as a "Professional Service Corporation." By this time many taxpayers were ready to take the mighty sword, as implemented in some cases by the new state laws, into court if necessary. The commissioner was still holding up his rusty and battered shield, but he obviously felt himself in trouble. Undoubtedly, he reasoned, those who had already taken up the sword for 1964 and prior years were not going to give up those years on the basis of the 1965 regulations.

The commissioner decided there was only one thing left to do at that point—concede all professional service corporation cases for the years 1961 through 1964, but come out fighting for all years thereafter. Thus, along with the 1965 regulations, the commissioner made his famous announcement creating an amnesty for the period indicated during which time he would not go into battle.[8] However, through his tough new regulations, he warned against future use of the sword by professional persons. "The sword cannot win! All professional taxpayers must throw down their swords and give up! If not, I, the commissioner, will fight you to the bitter end!"

Again, the psychological warfare probably worked on some but not all. In fact, four groups of professional taxpayers have recently slashed their way to impressive victories in the courts.[9] Thus, it is seen that since Kintner first turned the sword upon the commissioner approximately 20 years ago, those taxpayers who were brave enough to do battle in the courts have been

successful. The sword is available for use by all, which means, of course, that it is still available for use by the commissioner when he chooses to use it.[10]

To Remain Unblemished

For professional men who remain self-employed and desire not to be taxed as a corporation, certainly it should be an easy task to avoid having the sword used against them. In fact, it is very doubtful that the commissioner will ever again attempt to use the sword against professional persons, and he is perhaps now sorry about his success against the practicing physicians operating as "The Pelton Clinic" in 1936. As to those who desire to remain self-employed, Congress has attempted some measure of tax equality between them and corporate employees insofar as retirement plans are concerned by the enactment of the Self-Employed Retirement Act, also known as the "Keogh Act" or "H.R. 10." However, retirement plans for self-employed persons offer less advantages in that (1) a larger deductible contribution is allowed under the corporate plan (under H.R. 10 the limit is $2,500 for owners or partners); (2) more flexibility is allowed with regard to coverage by classes under the corporate plan; (3) the vesting schedule is more liberal under the corporate plan; (4) integration with social security is available only under the corporate plan; (5) lump sum distribution produces capital gain under corporate plan as opposed to ordinary income under self-employed plan; (6) the use of trustees is more liberal under the corporate plan, and (7) death proceeds are estate tax-free under the corporate plan and taxable under the self-employed plan.

It appears that in spite of the commissioner's attempt to discriminate against professional persons and deny to them the use of the sword to obtain taxation as a corporation, Congress in creating the sword intended to discriminate against no one, not the commissioner, not taxpayers in general, and certainly not one particular taxpayer as opposed to another. As stated by the court in one of the recent cases,[11] "the discrimination (against professional persons) perpetuated in the (1965) regulation is not supported by the statute, judicial precedent or sound tax policy." And, so it should be, for as long as there is no discrimination in its use, the sword will remain unblemished, as will the Congress who created it and the courts who decide the outcomes of the battles.

Footnotes

1. Cases won by the commissioner during this period include *Morrissey v. Commissioner,* 296 U.S. 344 (1935); *Helvering v. Coleman-Gilbert Associates,* 296 U.S. 369 (1935); *Swanson v. Commissioner,* 296 U.S. 362 (1935); *Thrash Lease Trust v. Commissioner,* 99 F. 2d 925 (9th Cir. 1938), Cert. den., 306 U.S. 654; and *Pelton v. Commissioner,* 82 F. 2d 473 (7th Cir. 1936).
2. Cases lost by the commissioner include *T. A. Johnson,* 38 B.T.A. 1199 (1938), appeal to 5th Cir. dismissed; and *Commissioner v. Gerstle,* 95 F. 2d 587 (9th Cir. 1938).
3. *U. S. v. Kintner,* 216 F. 2d 418 (9th Cir. 1954), aff'm. 107 F. Supp. 976 (D.C. Mont., 1952).
4. *Galt v. United States,* 175 F. Supp. 361 (D.C. Tex. 1959) and *Foreman v. United States,* 232 F. Supp. 134 (D.C. S.D. Fla. 1964).
5. Announcement on Dec. 23, 1959, 24 Fed. Reg. 10450.
6. 1960 Treas. Regs. 301.7701.
7. T.I.R. No. 471, I.R.B. 1963-21, p. 42.
8. Rev. Proc. 65-27, 1965-2, C. B. 1017.
9. *Empey v. United States,* 272 F. Supp. 851 (D.C. Colo. 1967), appeal docketed, No. 9814, 10th Cir. Dec. 18, 1967, *O'Neill v. United States,* 281 F. Supp. 359 (N.D. Ohio, 1968), *Kurzner v. United States,* ——F. Supp. —— 68-2 USTC 9514 (D.C.S.D. Fla., 1968) and *Holder v. United States,* ——F. Supp. —— 68-2 USTC 9504 (D.C.N.D. Ga., 1968). See also *Drs. Hill & Thomas Co. v. U. S.,* 392 F. 2d 205 (6th Cir. 1968) where the court dismissed the corporations refund suit for the year 1965 as being moot because the commissioner had already refunded all of the taxes paid by the corporation (apparently since the commissioner did not recognize the corporation as a separate tax entity under the 1965 regulations).
10. See for example, the recent case of *National Savings & Trust Co. v. U. S.,* ——F. Supp. —— 68-1 USTC 9371 (D.C. D.C., 1968, where the commissioner successfully used the sword in contending that a real estate trust, although unincorporated, should be taxed as a corporation because it had more corporate characteristics than those of a trust.
11. *O'Neill v. United States, supra.*

▶ Mr. Boggs, P.O. Box 1438, Tampa 33601.

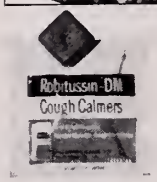
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Hill Crest Hospital was established in 1925 as Hill Crest Sanitarium to provide private psychiatric treatment of nervous or mental disorders. Individual patient care has been the theme during its 43 years of service.

Both male and female patients are accepted and departmentalized care is provided according to sex and the degree of illness.

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James A. Becton, M.D., F.A.P.A.

CLINICAL DIRECTORS:
James K. Ward, M.D., F.A.P.A.
Hardin M. Ritchey, M.D., F.A.P.A.

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. . . NATIONAL ASSOCIATION OF PRIVATE PSYCHIATRIC HOSPITALS . . .
ALABAMA HOSPITAL ASSOCIATION . . .
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Hill Crest
HOSPITAL
BIRMINGHAM, ALABAMA

See next page for prescribing inform



You've made it one of your specifics in acute otitis media

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DEMETHYLCHLORTETRACYCLINE



You've made it one of your specifi in acute otitis media

DECLOMYCIN acts against many strains of H. influenzae, pneumococci and streptococci, t most common invaders. In otitis media, where i is difficult to isolate the causative organism, thi coverage may be important. However, some stra may be resistant and other pathogens can be involved.

You've found the high serum levels of DECLOMYCIN important, too. Its prolonged act permits convenient 300 mg b.i.d. or 150 mg q.i.d. administration.

When specimens are obtainable, your culture studies will indicate the usefulness of DECLOMYCIN.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enteroco pruritus ani. Skin—maculopapular and erythematous rashes; a case of exfoliative dermatitis has been reported. Photosensiti onycholysis and discoloration of the nails (rare). Kidney—rise in E apparently dose-related. Transient increase in urinary output, sc times accompanied by thirst (rare). Hypersensitivity reactions— caria, angioneurotic edema, anaphylaxis. Teeth—dental staining low-brown) in children of mothers given this drug during the latter of pregnancy, and in children given the drug during the neonatal od, infancy and early childhood. Enamel hypoplasia has been se a few children. If adverse reaction or idiosyncrasy occurs, discont medication and institute appropriate therapy. Demethylchlort cycline may form a stable calcium complex in any bone-forming ti with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Sh be given 1 hour before or 2 hours after meals, since absorptic impaired by the concomitant administration of high calcium cor drugs, foods and some dairy products. Treatment of streptocc infections should continue for 10 days, even though symptoms subsided.

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Capsules: 150 mg; **Tablets:** film coated, mg, 150 mg and 75 mg of demethylchlort cycline HCl.

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EXPECTORANT



Each fluidounce contains: 80 mg. Benadryl® (diphenhydramine hydrochloride, Parke-Davis); 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol.

An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT is the leading cough preparation of its kind.

BENYLIN EXPECTORANT tends to inhibit cough reflex... soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes BENYLIN EXPECTORANT easy to take.

PRECAUTIONS: Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with BENYLIN EXPECTORANT should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENYLIN EXPECTORANT.

ADVERSE REACTIONS: Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.

PACKAGING: Bottles of 4 oz., 16 oz., and 1 gal.

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For a cold, NTz® Nasal Spray provides rapid relief of nasal symptoms. Relief starts with the first spray which opens the inferior part of the common meatus. A second spray, a few minutes later, will shrink the turbinates to help provide sinus drainage and ventilation. Dosage may be repeated every three or four hours as needed, for temporary relief of symptoms. NTz is well tolerated but overdosage should be avoided.

As a sinusitis deterrent, NTz Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

Supplied: NTz Nasal Spray, plastic squeeze bottles of 20 ml.; NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTz is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

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The Freeport Retreat

Richard M. Fleming, M.D.

The 1968 fall meeting of the Board of Governors of the FMA recorded the best attendance of any previous Governors' meeting. This meeting, which takes place annually outside the state, is a most rewarding experience. The three day "retreat" at Freeport, Bahamas, not only permitted the transaction of a large volume of FMA business but afforded an opportunity for the Governors, committee chairmen, Blue Cross-Blue Shield representatives, AMA delegates and AMA staff, State Board of Health representatives and others interested in the FMA to get together for informal discussions on a variety of important problems.

The minutes of the meeting are on record at the FMA headquarters for perusal by any active member of the Association. A summary of the actions taken by the Board of Governors will appear in the Delegates Handbook in May and certain information will appear in the Journal from time to time. It might be well at this time, however, to review some of the highlights of the meeting.

1. At the request of the chairman of the State Board of Regents, nominations to a medical advisory committee to the Board of Regents were made. These are the members of the Association's Committee on Medical Schools with the exception of the deans of the medical schools, plus the chairmen of the medical advisory committees to the three medical schools.

2. The Board voted to reaffirm the FMA's position that allied health personnel be under the control of the Board of Medical Examiners, be licensed by the Board of Medical Examiners, and that a provision be included in the law that they must work under the direct supervision of physicians and that the president be authorized to appoint a special committee recommended by the Judicial Council.

3. The format of the annual meeting was discussed in detail and a motion was carried to move everything possible from the second House of Delegates to the first House of Delegates; to start the first House of Delegates on Thursday morning at 8:30 a.m. and recess at 10:45 a.m.; to allot the hours from 11:00 a.m. to 12:30 p.m Thursday for the Blue Shield meeting and to start the reference committees at 2:30 p.m.; on Friday, to hold the joint FLAMPAC-Woman's Auxiliary luncheon from 12:15 to 2:15 p.m. and they must adhere strictly to this time, and to start the Friday afternoon scientific sessions at 2:30 p.m.

Other suggestions for improving the meeting were to limit nominating speeches to five minutes and seconding speeches to one minute and to purchase an electronic speakers device which automatically times speeches.

Specialty groups have been asked if they would like to present the scientific portion of their meetings in cooperation with FMA on Friday in the morning before the General Session, and all Friday afternoon, as well as Saturday morning and afternoon.

4. A statement on cardiopulmonary resuscitation was adopted, urging hospitals and other agencies to provide ongoing training programs in this field for nurses.

5. In reference to Workmen's Compensation, it was voted to authorize the Association's legal counsel to petition the Florida Industrial Commission for administrative relief and to adopt a fee schedule which will pay physicians' fees for services rendered in compliance with the provisions of the Florida statutes; if relief is not obtained from the Florida Industrial Commission, legal recourse will be sought in the appropriate court and appropriate specialty groups and individual physicians will be permitted to participate in these proceedings.

6. The Florida Medical Foundation was asked to explore the possibility of securing a grant to study the most effective, efficient and modern manner in which to organize a statewide ambulance service.

7. With regard to Comprehensive Health Planning, each county medical society is urged to designate a specific committee or individual responsible for such planning in its area.

8. Concerning the appointment of a Secretary of Health, Education, and Welfare, a motion was carried unanimously to request the Board of Trustees of the AMA through the appropriate individuals to approach Mr. Richard Nixon regarding the reorganization of the Department of Health, Education, and Welfare, and for health activities in this department or a separate department to be headed by an appropriate doctor of medicine, and that positive recommendations be made regarding this individual.

The reports of the councils, committees, the State Board of Health and Blue Cross and Blue Shield were presented by the respective chairmen and discussed in detail. These reports, representing an enormous amount of time and effort by the committee members, are too voluminous to be adequately reported here. They will be the subject of a future report in this section.

FMA Conference of County Medical Society Officers

Richard M. Fleming, M.D.

The eleventh annual conference of county medical society presidents, presidents-elect and secretaries will convene in Orlando at the Robert Meyer Motor Inn, January 25-26, 1969. The program appears on the opposite page.

This conference might well be considered an interim session of the FMA, so important and comprehensive is the agenda. The acting executive vice president of the AMA, Dr. Ernest B. Howard, will bring us the latest information on AMA activities at the national level. Dr. Granville Larimore, our new state coordinator for the Regional Medical Program, will talk about the recent developments and projected activities of this program. Among other subjects to be discussed in depth are Workmen's Compensation fee schedule, national and state legislative programs, Comprehensive Health Planning, professional liability, and so on.

Although this program is designed primarily to involve the presidents and secretaries of the county societies, every active member of the FMA can profit by and enjoy becoming informed on what's going on in medicine and the FMA today.

So come on down, over or up to Orlando—it's about the most compact one-and-a-half days you can spend to learn what's new in FMA activities—besides, the cocktail party is mighty nice!

ELEVENTH ANNUAL CONFERENCE

COUNTY MEDICAL SOCIETY PRESIDENTS AND SECRETARIES

Sponsored by the Florida Medical Association, Inc.

January 25-26, 1969

Robert Meyer Motor Inn

Orlando, Florida

Saturday Morning — January 25

9:00 a.m.-12:00 noon FMA Workshop on state medical legislation

Saturday Afternoon — January 25

Presiding: Jack Q. Cleveland, M.D., President

1:00 p.m. Registration

1:15 p.m. Introductory Remarks—Dr. Cleveland

1:30 p.m. The National Medical Scene—Ernest B. Howard, M.D., Executive Vice President, American Medical Association

2:00 p.m. FMA Scientific Activities—Richard C. Dever, M.D., Chairman, Council on Scientific Activities (Annual Meeting; Postgraduate Education; Medical Education; Millis Report, etc.)

2:30 p.m. Heart Disease, Cancer and Stroke, Regional Medical Programs — Granville Larimore, M.D., State Coordinator, Florida Advisory Council on Heart Disease, Cancer and Stroke, Inc.

2:45 p.m. Comprehensive Health Planning—Robert Roesch, Director, Comprehensive Health Planning, State of Florida

3:15 p.m. Coffee and Coke break

3:30 p.m. Health Careers and Paramedical Personnel—James W. Walker, M.D., Chairman, Council on Allied Professions and Vocations

4:00 p.m. Workmen's Compensation Medical Fee Schedule—Joseph G. Matthews, M.D., Chairman, Council on Specialty Medicine

4:30 p.m. FMA State Legislative Program—Edward G. Haskell Jr., M.D., Chairman, Committee on State Legislation

6:30 p.m. Social Hour

7:30 p.m. Buffet Dinner

Sunday Morning — January 26

Presiding: Henry J. Babers Jr., M.D., President-Elect

9:00 a.m. Medical Services—James M. Ingram, M.D., Chairman, Council on Medical Services

9:30 a.m. County Medical Society Programs and Problems

Large — Wilbur C. Sumner, M.D., President, Duval County Medical Society

Medium—James R. Forlaw, M.D., President, Palm Beach County Medical Society

Small—Ethel H. Trygstad, M.D., President, Collier County Medical Society

10:30 a.m. Coffee and Coke break

10:45 a.m. Specialty Society Programs and Problems:

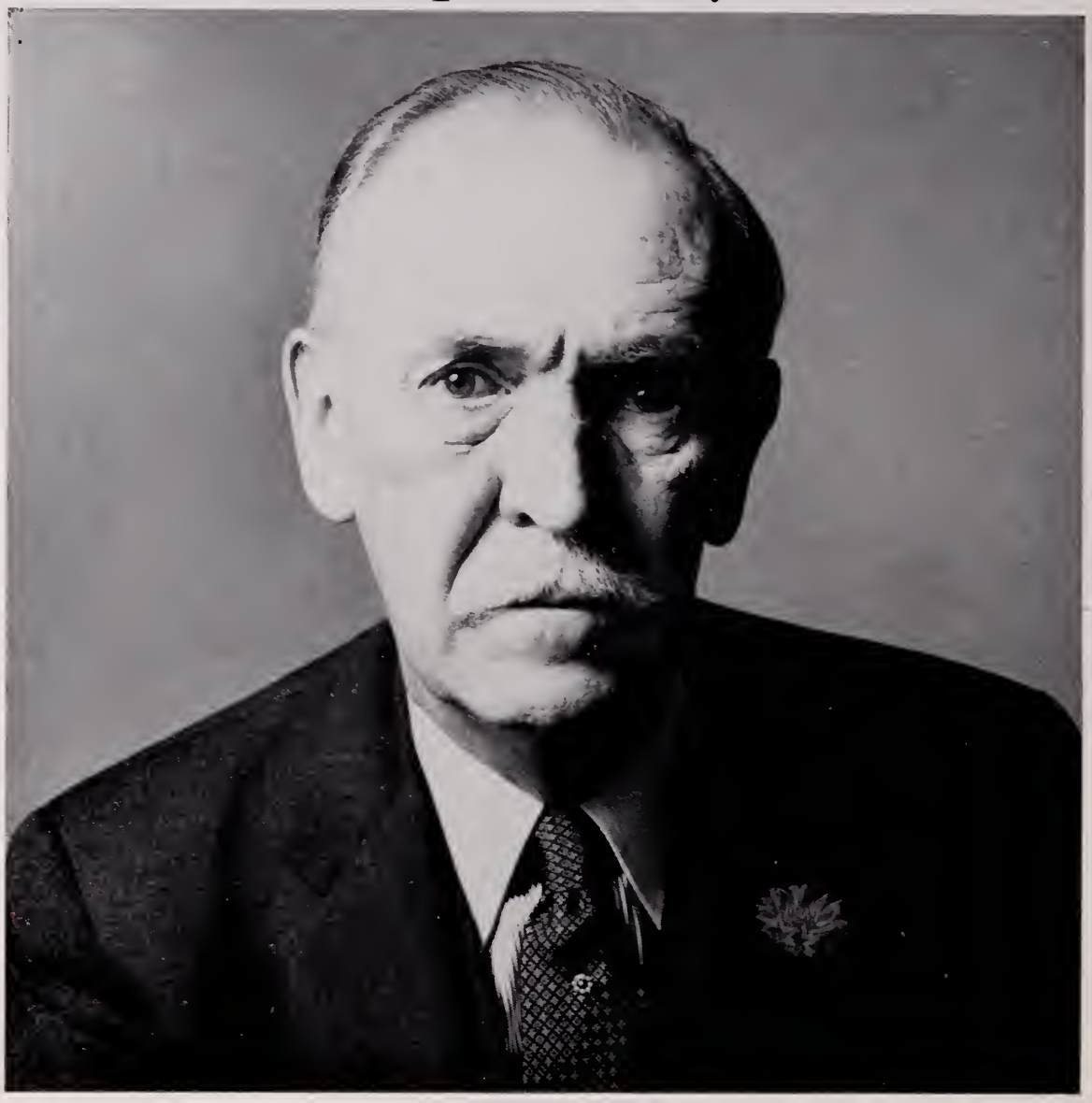
Florida Orthopedic Society—Claude D. Holmes, Jr., M.D., President

Florida Psychiatric Society—Alfred D. Koenig, M.D., President

Florida Society of Anesthesiologists — Franklin L. McKechnie, M.D., President

12:00 Noon Adjournment

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A patient of advancing years may appear to "have everything," but may well be in need—*medically*. You know the symptoms. He's tired most of the time. Though there's nothing wrong with him organically, he suffers from general malaise. Lassitude has become his way of life . . . vague aches and pains his major concern.

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In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.
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No. 252—MEDIATRIC Capsules, in bottles of 30, 100, and 1,000.
No. 910—MEDIATRIC Liquid, in bottles of 16 fluidounces.

	Each MEDIATRIC Tablet or Capsule contains:	Each 15 cc. (3 teaspoonfuls) of MEDIATRIC Liquid contains:
Conjugated estrogens-equine (PREMARIN®)	0.25 mg.	0.25 mg.
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Methamphetamine HCl	1.0 mg.	1.0 mg.
Cyanocobalamin	2.5 mcg.	1.5 mcg.
Intrinsic factor concentrate	8.0 mg.	—
Thiamine HCl	—	5.0 mg.
Thiamine mononitrate	10.0 mg.	—
Riboflavin	5.0 mg.	—
Niacinamide	50.0 mg.	—
Pyridoxine HCl	3.0 mg.	—
Calcium pantothenate	20.0 mg.	—
Ferrous sulfate exsiccated	30.0 mg.	—
Ascorbic acid	100.0 mg.	—
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Florida Medical meetings

FMA Approved Postgraduate Meetings

JANUARY

2- 5 Teaching Family Medicine Workshop, University of Miami, Miami

9-12 Sixth Annual Postgraduate Seminar in Anesthesiology, Eden Roc Hotel, Miami Beach

15-18 Seminar in Surgery Art and Science in Therapy of Difficult Problems in Surgery, Eden Roc Hotel, Miami Beach

15-19 Bedside Interpretation of Laboratory Data, Americana Hotel, Bal Harbour

22-24 Lakeland Graduate Medical Assembly, "Frontiers of Medicine 1969," Sheraton Motor Inn, Cypress Gardens, Winter Haven

23-24 Seminar in Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville

23-25 Third Annual Radiotherapy Symposium, Four Ambassadors Hotel, Miami

26-30 Annual Pediatric Postgraduate Course—"Renal and Genitourinary Disorders," Deauville Hotel, Miami Beach

Jan. 30-Feb. 1 Developmental Aspects of Perception, Hearing, Speech and Learning, J. Hillis Miller Health Center, Gainesville

MARCH

12-15 Teaching Conference in Clinical Cardiology, Hilton Plaza Hotel, Miami Beach

19-22 Trends in Systems for the Radiologic Examination of the Alimentary Tract, Sheraton Four Ambassadors Hotel, Miami

Mar. 31-Apr. 2 Current Trends in Chest Roentgenology, Fontainebleau Hotel, Miami Beach

National and Regional Meetings in Florida

JANUARY

12-17 Society of Cryosurgery, Hilton Plaza, Miami Beach

FEBRUARY

8-13 Twenty-First Annual Seminar of the International Academy of Proctology, Hollywood Beach Hotel, Hollywood Beach.

13-15 Society of University Surgeons, Fontainebleau Hotel, Miami Beach

MARCH

2- 5 International Anesthesia Research Society, Americana Hotel, Bal Harbour

15-19 American Academy of Allergy, Americana Hotel, Bal Harbour

APRIL

19-23 Association for Research in Ophthalmology, Sheraton Sandcastle Hotel and Statler-Hilton Inn, Sarasota

28-May 1 American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour

30-May 3 Neurosurgical Society of America, Key Biscayne Hotel, Key Biscayne

MAY

2- 4 American Academy of Psychoanalysis, Deauville Hotel, Bal Harbour

2- 4 Society of Biological Psychiatry, Hilton Plaza, Miami Beach

3 American College of Psychiatrists, Deauville Hotel, Bal Harbour

4- 6 American Society for Adolescent Psychiatry, Miami

4- 9 American Society for Microbiology, Fontainebleau Hotel, Miami Beach

5- 9 American Psychiatric Association, Americana Hotel, Bal Harbour

19 Association for the Advancement of Psychotherapy, Hotel Americana, Bal Harbour

22-25 National Tuberculosis and Respiratory Disease Association, Fontainebleau Hotel, Miami Beach

24-26 American Thoracic Society, Fontainebleau Hotel, Miami Beach

Florida Organizations of Medical Interest
Meetings and Officers

Organization	President	Secretary	Annual Meeting
rida Medical Association	Jack Q. Cleveland, Coral Gables	Floyd K. Hurt, Jacksonville	Bal Harbour, May 14-18, 1969
lorida Specialty Societies			
rgy Society	Robert J. Brennan, Ft. Lauderdale	Meyer B. Marks, Miami Beach	
sthesiologists, Soc. of	Franklin B. McKechnie, Winter Park	George T. Edwards, Ft. Lauderdale	
st Phys., Am. Coll., Fla. Chap.	Howard M. Dubose, Lakeland	Richard A. Elias, Miami	
matology, Society of	William W. Bruce, Winter Park	Arnold R. Goddard, Miami	
troenterologic Society	Charles E. Aucremann, St. Pet'sb'g	James H. Johnson, Lakeland	
eral Practice, Academy	Edward G. Haskell Jr., Tallahassee	Joseph P. Hendrix, Port St. Joe	
rnal Medicine	William M. Straight, Miami	Robert L. Andreae, Ft. Lauderdale	
rology, Florida Society of	Richard P. Schmidt, Gainesville	James B. Perry, Ft. Lauderdale	
rosurgical Society	Jack W. Barrett, Miami	Howard C. Chandler, Jacksonville	
t. & Gynec. Society	T. Vernon Finch, Sarasota	Joseph W. Pilkington, St. Petersb'g	
thalmology Society	Samuel T. Register, Clearwater	Charles F. McCrory, Jacksonville	
hopedic Society	Claude D. Holmes Jr., Miami	Albert A. Wilson, Tampa	
laryngology Society	John H. Webb Jr., Orlando	James H. Mendel Jr., S. Miami	
hologists, Society of	David K. Davis, St. Petersburg	Wallace M. Graves Jr., Ft. Myers	
iatric Society	Richard G. Skinner Jr., Jack'ville	Thomas M. Brill, Gainesville	
s. Med. & Rehab., Fla. Soc.	Sterling H. Huntington, Coral Gbls.	Justine L. Vaughen, Orlando	
stic & Reconstr. Surgery	Diran M. Seropian, Ft. Lauderdale	William G. Taylor, Tampa	
ventive Medicine, Fla. Soc.	Carl Fromhagen Jr., Clearwater	James A. Horton, Okeechobee	
ctologic Society	Matthew A. Larkin, Miami	Manuel L. Carbonell, Miami	
chiatric Society	Alfred D. Koenig, St. Petersburg	Walter M. White Jr., St. P'bg.	
liological Society	Malcolm Van de Water, Palm B'ch	Robert H. Nickau, Palm Beach	
geons, Am. Coll., Fla. Chap.	Emmet F. Ferguson Jr., Jack'ville	Harry W. Reinstine Jr., J'ville	
geons, Gen., Fla. Assn.	Henry J. Babers Jr., Gainesville	Clyde M. Collins, Jacksonville	
geons, Int. Coll., Fla. Chap.	Morris H. Blau, Miami	Wendell J. Newcomb, Pensacola	
geons, Thoracic, Fla. Society	Richard H. Blank, Tampa	Carlos R. Lombardo, Miami	
logical Society	Miles W. Thomley, Orlando	Horace D. Atkinson, W. Palm Bch.	
erican Cancer Society, Div.	David S. Hubbell, M.D., St. Petersburg	Mrs. Peggy Lombardo, J'ville	Orlando, November 1969
ritis Foundation, Chap.	Mr. William Namack III, Sarasota	Miss Barbara White, Gainesville	Orlando, Apr. 5, '69
ic Science Examining Board	Paul A. Vestal, Ph.D., Winter Park	Theodore A. Ashford, Ph.D., 1832 Bearss Ave., Tampa 33612	Miami, June 7, '69
od Banks, Association	Edward S. Cestaric, M.D., Ft. Lauderdale	Mrs. Alma Del Valle, Tampa	Tampa, Apr. 24-26, '69
e Shield of Florida, Inc.	Warren W. Quillian, M.D., Coral Gables	Henry J. Babers Jr., M.D., Gainesville	Bal Harbour, May 14-18, '69
rd of Medical Examiners	Carl C. Mendoza, M.D., Jacksonville	J. Champneys Taylor, M.D., 1661 Riverside Ave., Jacksonville	Orlando, Jan. 26-28, '69
pled Children & Adults, Soc.	Thomas B. Abbott, Ph.D., G'ville	Mr. Ray J. Worssm, Sarasota	St. Petersburg, September 1969
betes Association	Robert B. Katims, M.D., Miami	Joseph C. Shipp, M.D., G'ville	Miami Beach, Oct. 10-11, '69
rt Association	T. L. Batchelder, M.D., Jack'ville	Nancy Noble, Ph.D., Miami	Ft. Lauderdale, May 30-June 1, '69
tal Health Assn. of Fla., Inc.	Robert H. Vinson, M.D., Vero Bch.	Mrs. Alyce Christ, Cocoa Beach	Jacksonville, Apr. 17-19, '69
vention of Blindness, Soc.	Mr. R. B. Matthews, Coral Gables	Mrs. Richard Nosti, Tampa	February 1970
lic Health Association	Mrs. Mabel Johansson, W. P. B.	Mrs. Harriett Brooks, Pensacola	Jacksonville, Oct. 16-18, '69
arded Children, Association	Mr. M. P. Smith, Clearwater	Mrs. Howard Lang, Miami	Daytona Beach, May 1969
racic Society	Nelson H. Kraeft, Tallahassee	Richard G. Connar, M.D., Tampa	Miami Beach, May 1969
erculosis & Res. Dis. Assn.	Mr. R. A. Caruthers, Orlando	Mr. C. W. Lantz, Hollywood	Miami Beach, May 1969
ted Cerebral Palsy of Florida	Mr. Clyde Hagler, Pensacola	Mr. Tom Freeman, Sanford	November 14-15, '69
man's Auxiliary	Mrs. Linus W. Hewit, Tampa	Mrs. Lloyd K. Netto, W. Palm Bch.	Bal Harbour, May 14-18, '69

(Most Specialty Group meetings are scheduled at the time of the annual meeting of the Association)

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SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	TOTAL MEMBERS Associate	Active
Alachua	Taylor H. Kirby Jr., Gainesville	George A. Dell, Gainesville	2nd Tues.	56	143
**Bradford, Gilchrist, Union*					
Bay	Owen Reese Jr., Panama City	John F. Mason, Panama City	1st Tues.	0	40
Brevard	Michael Foley, Melbourne	John Blackburn, Melbourne	2nd Tues.	18	153
Broward	Russell B. Carson, Ft. Lauderdale	Robert J. Brennan, Ft. Lauderdale	4th Tues.	79	404
Charlotte	Charles M. Wilson, Port Charlotte	Francis R. Meyers, Punta Gorda	2nd Tues.	0	14
Clay	Arthur D. Thaeler Jr., Penney Farms	E. Charlton Prather, Orange Park	4th Tues.	0	14
Collier	Ethel H. Trygstad, Naples	Lucian L. Alexander, Naples	3rd Wed.	0	31
Columbia	Charles T. Ozaki, Lake City	Don D. Weiffenbach, Lake City	3rd Wed.	0	14
Dade	Francis N. Cooke, Miami	John B. Liebler, Coral Gables	1st Tues.	259	1,384
DeSoto-Hardee-Glades	Harold S. Agnew, Arcadia	Gordon H. McSwain, Arcadia	1st Tues.	1	17
Duval	Clyde M. Collins, Jacksonville	John A. Rush Jr., Jacksonville	1st Tues.	46	450
Escambia	William T. Patton, Pensacola	Theodore J. Marshall, Pensacola	2nd Tues.	7	135
Franklin-Gulf	J. Wayne Hendrix, Port St. Joe	Photis J. Nichols, Apalachicola	Last Wed.	1	5
Gadsden-Liberty	Robert P. Whittier, Quincy	Pat M. Woodward, Quincy	Quarterly	1	14
Highlands	Walter M. Ost, Avon Park	Donald C. Hartwell, Avon Park	3rd Mon.	3	23
Hillsborough	James M. Ingram, Tampa	Rodney D. Steinmetz, Tampa	1st Tues.	9	354
Indian River	Hampton L. Schofield Jr., Vero Beach	John H. Terry, Vero Beach	2nd Tues.	4	25
Jackson-Calhoun	Henry A. Knowles, Marianna	Glenn E. Padgett, Marianna	1st Thurs.	0	20
Lake	James Todd, Eustis	Thomas H. Nichols, Clermont	1st Wed.	1	49
Lee-Hendry	Edward W. Salko, Ft. Myers	Marcus M. Moore, Fort Myers	3rd Mon.	14	72
Leon-Wakulla-Jefferson	Frank E. All, Tallahassee	Luther L. Pararo, Tallahassee	1st Mon.	22	87
Madison	Julian M. DuRant, Madison	A. Franklin Harrison, Madison	1st Tues.	0	5
Manatee	Millard P. Quillian, Bradenton	Robert E. King, Bradenton	2nd Tues.	5	60
Marion	West Bitzer, Ocala	C. Brooks Henderson, Ocala	3rd Tues.	6	47
**Levy*					
Monroe	Jose T. Sanchez Jr., Key West	Jaime M. Benavides Jr., Key West	1st Thurs.	2	23
Nassau	Cecil B. Brewton, Fernandina Beach	John B. Britton, Fernandina Beach	2nd Thurs.	5	7
**Baker*					
Okaloosa	Robert J. Saxer, Fort Walton Beach	Joseph C. Wilson, Fort Walton Beach	1st Wed.	0	27
Orange	Louis C. Murray, Orlando	Paul C. Harding, Orlando	3rd Wed.	64	340
**Osceola*					
Palm Beach	Bernard Kimmel, W. Palm Beach	Robert R. Wadlund, Delray Beach	4th Mon.	45	304
Pasco-Hernando-Citrus	Edwin K. House, Brooksville	James W. Basinger, Dade City	2nd Thurs.	1	32
**Sumter*					
Pinellas	John T. Karaphillis, Clearwater	Joseph A. Ezzo, St. Petersburg	1st Mon.	60	375
Polk	George P. Graf, Winter Haven	Marvin G. Burdette, Winter Haven	2nd Wed.	11	197
Putnam	Roy E. Campbell, Palatka	Bennie J. Massey, Palatka	2nd Tues.	2	12
St. Johns	Kenneth J. Farrow, St. Augustine	Vernon A. Lockwood, St. Augustine	3rd Tues.	0	20
St. Lucie-Okeechobee-Martin	Wilbur S. Turner, Fort Pierce	John B. Sullivan, Fort Pierce	3rd Thurs.	3	51
Santa Rosa	Elbert W. Sutton, Milton	Claude J. Barnes, Milton	2nd Tues.	2	13
Sarasota	Ernest M. Grochowski, Sarasota	Forrest Chapman Jr., Sarasota	2nd Tues.	10	128
Seminole	William C. Rape, Sanford	Robert J. Smith, Sanford	2nd Tues.	0	30
Suwannee-Hamilton-LaFayette	Frederick T. Mickler Jr., Jasper	Alex Kish, Live Oak	1st Sat.	0	7
Taylor	Hoyt Horne, Perry	John A. Dyal Jr., Perry	Last Fri.	0	8
**Dixie*					
Volusia	Thomas D. Cook, Datyona Beach	Richard W. Dodd, Daytona Beach	2nd Tues.	10	126
**Flagler*					
Walton	Edgar H. Myers, DeFuniak Springs	McKinley Cheshire Jr., DeFuniak Spgs.	3rd Tues.	0	8
			Total	747	5,268
			Grand Total	6,015	
			Direct	1	1

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physicians wanted

General Practitioners

EXCELLENT OPPORTUNITY for general practitioner in community of 15,000; central Florida; 76 bed JCAH hospital. Write or call collect R. C. Thompson, Bartow Memorial Hospital, Bartow, Fla.

WANTED: Physician to do general practice with two established GP's for association and eventual partnership. 35-bed approved JCAH hospital soon to expand—with modern professional arts bldg. and northeast coast Florida. Write C-843, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: Hospital based physicians to do general practice. Central Florida, 60 bed, JCAH hospital, will provide office space, equipment, personnel, etc. "Financial floor" (basic salary) open to negotiation. Contact W. Harold O'Neal, Administrator, Highlands General Hospital, 3600 South Highlands Avenue, Sebring, Florida 33870. EV 5-6101.

URGENTLY NEEDED.—GP to join well established physician. Newly constructed office including laboratory and x-ray. Town close to Miami and Palm Beaches with all sports available. Phone 983-8531, Clewiston, Fla.

WANTED: General practitioner for association with mixed group. Salary plus percentage and all expenses. Share coverage on day off, weekends, vacations. Guarantee $20,000 first year. Contact T. C. Kenaston Jr., M.D., Box 550, Cocoa, Fla. 32922. Phone (305) 636-4221.

URGENTLY NEEDED: GP to assist established but presently incapacitated physician in operation of 35-bed county hospital. Association or partnership if desired. Compensation open. North central Florida. Write C-850, P.O. Box 2411, Jacksonville, Fla. 32203.

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INTERNIST WANTED: To join two-man "professional association" in greater Miami area. Salary open, tax-free pension or profit-sharing available. Share time off. Write C-789, P.O. Box 2411, Jacksonville, Fla. 32203.

PSYCHIATRIST WANTED-NEEDED: To continue county solo nine year practice terminated by sudden death. Office, furniture, files, patients ready, waiting. Local hospital psychiatric facility under construction. Contact Mrs. Frederick L. Patry, 5912 Riverview Blvd. W., Bradenton, Fla. 33505.

WANTED: Internal medicine practice opportunity for board eligible internist with subspecialty interest in Southeastern coastal community. Starting salary $21,000 first year with opportunity for full partnership. Write C-844, P.O. Box 2411, Jacksonville, Fla. 32203.

SURGEON WANTED: To enter established practice as only surgeon in North Florida college town. Excellent central location near two interstate highways; excellent hunting, fishing and golf. Write C-829, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: Board eligible or certified. Cardiology interest. In suburban Miami, Florida. Long established professional association to replace third man vacancy. Immediate opportunity. Salary negotiable. Corporation participation available after first year. Send curriculum vitae, age, marital and military status, licensure and financial interest to C-860, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: Internist, ENT man and pediatrician for association with established multispecialty group. Contact: W. T. Christian, Clinic Manager, White-Wilson Clinic, P. O. Drawer M-M, Ft. Walton Beach, Fla. 32548.

INTERNIST WANTED: Training in cardiology for partnership affiliation in well-established professional association in Miami Beach. Immediate opening. Write C-865, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: Board eligible or certified for expanding clinic in Palm Beach County. Gastroenterology film and fluoroscopy training desirable. Excellent hospitals. Academic, financial and personal satisfaction. Write C-866, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: For partnership in large general and surgical practice adaptable to departmentalization. FACS owner surgically oriented. 2,700 sq. ft. physical plant with unusual ancillary facilities.—Contact Charles W. Bush, M.D., 4337 Seagrape Dr., Lauderdale-By-The-Sea 33308, phone (305) 566-1167.

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SURGEON WANTED: To enter busy practice with fellow surgeon in small Florida town. Starting salary $35,000 for first year with full partnership later. Excellent gross. Town has hospital with good O.R. facilities and no bed problem now or in foreseeable future. Write C-863, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNISTS POSITION in industrial medicine, with Trans World Airlines at the Kennedy Space Center, Florida. Board certified or eligible. Florida license preferred. Duties include conducting physical examinations, diagnosis and treatment of injuries and illnesses of aerospace personnel, and cardiac evaluation. Contact N. E. Pellegrino, Manager-Employment Development, Washington Plaza Building, Parker Drive and U.S.1, Titusville, Florida. Phone (305) 267-5031.

Miscellaneous

WANTED: Emergency room physicians, Florida licensed, to join group, St. Petersburg. Yearly income $22,000 plus. Write C-864, P.O. Box 2411, Jacksonville, Fla. 32203.

PHYSICIANS WANTED: For full time practice in emergency room. $25,000 yearly minimum guarantee. Must have Florida license. Apply Chief of Staff, Tallahassee Memorial Hosptial, Tallahassee, Fla. 32303.

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INTERNIST OR GP: North Miami Beach, Fla. $18,000 start—leads to association. Contact Mr. Harold Kwart, 9999 N.E. 2nd Ave., Miami Shores, Fla. 33138.

GP OR INTERNIST to associate with three-man group, one surgeon and two GP's. Suburban Jacksonville. 30,000 first year to approximately $40,000 in two years of partnership as agreed. Call Dr. M. B. Bergh, (904) 264-9511.

WANTED: GP or general surgeon to join GP in small but growing community near medical school. Two new offices available with new hospital fully equipped. Write C-834, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: G.P. or internist for private practice netting at least $25,000 yearly. Pleasant surroundings, Jacksonville area. Seventy-five bed county hospital adjacent to modern office building with two colleagues. Write C-842, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: Florida licensed physician, experienced in all phases of general medicine, especially surgery, for association with board general surgeon-gynecologist. Excellent salary with partnership after two years. Write C-856, P.O. Box 2411, Jacksonville, Fla. 32203.

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WANTED: Emergency room physician in hospital; to join group of private physicians, 42 hour week, income $20,000 plus. Contact Bruce S. Webster, M.D., 1416 South Orange Ave., Orlando, Fla. 32806. Phone 647-5728.

situations wanted

GENERAL SURGEON: Board certified, licensed in Florida 1968. Desires association with another surgeon or group in a coastal city of central or southern Florida. Write C-855, P.O. Box 2411, Jacksonville, Fla. 32203.

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FOR SALE OR LEASE: Office, residence and parking area opposite Mound Park and All Children's Hospital. Retiring from practice of radiology. Phone 862-6962, St. Petersburg, Fla.

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AVAILABLE: We have office space for E.N.T. man, urgently needed in strictly medical building in prominent Miami Beach location. Building houses approximately 70 physicians and dentists, radiology lab, medical lab, optician and pharmacy. No E.N.T. man in building. Write David Kaplan, 1674 Meridian Ave., Room 104, Miami Beach, Fla. 33139 or call 531-7485.

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Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but a also occasionally observed at the lower dosag ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor men strual irregularities, nausea and constipation extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dys crasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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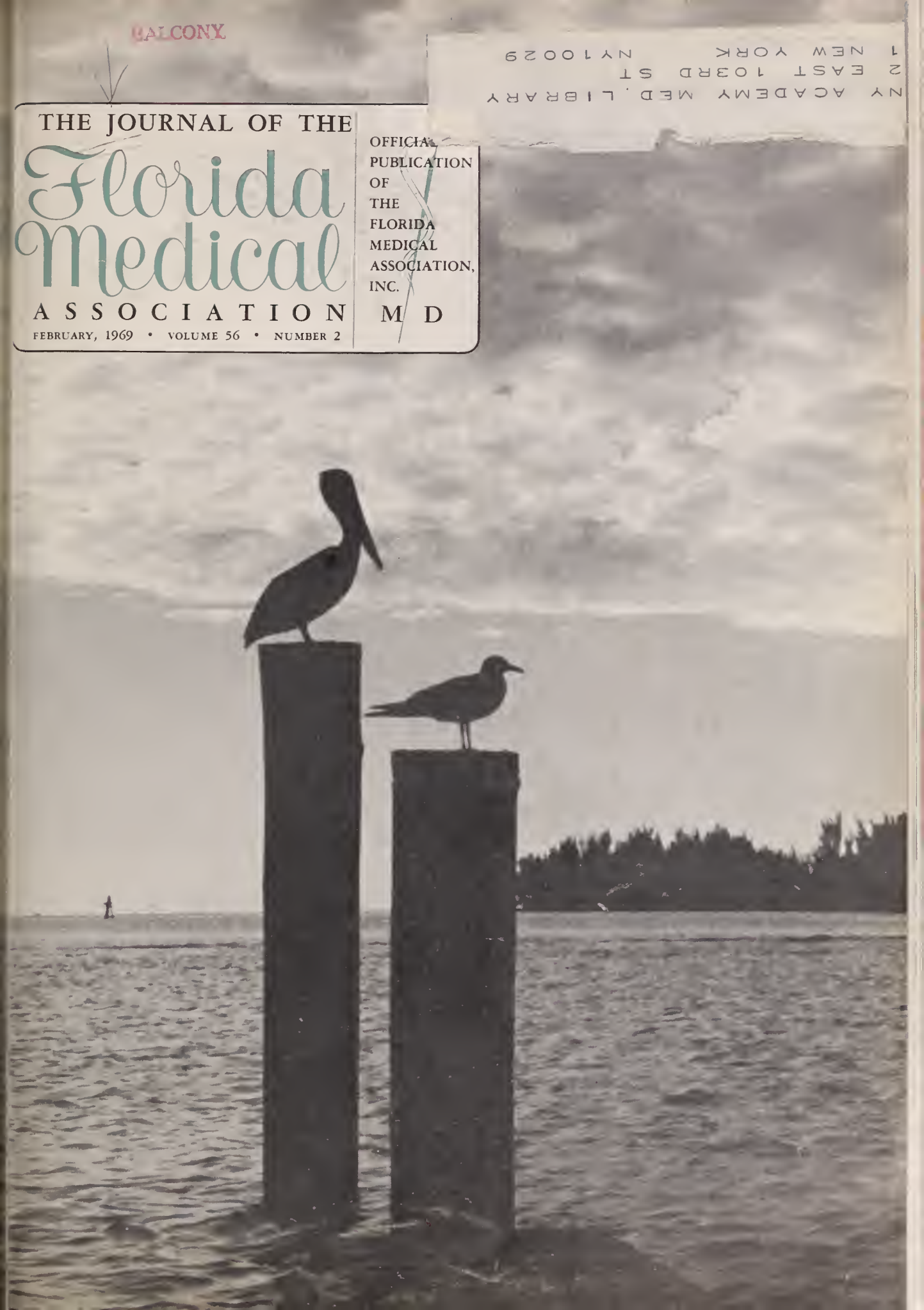
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FEBRUARY, 1969 • VOLUME 56 • NUMBER 2



in arrhythmias



to restore normal sinus rhythm

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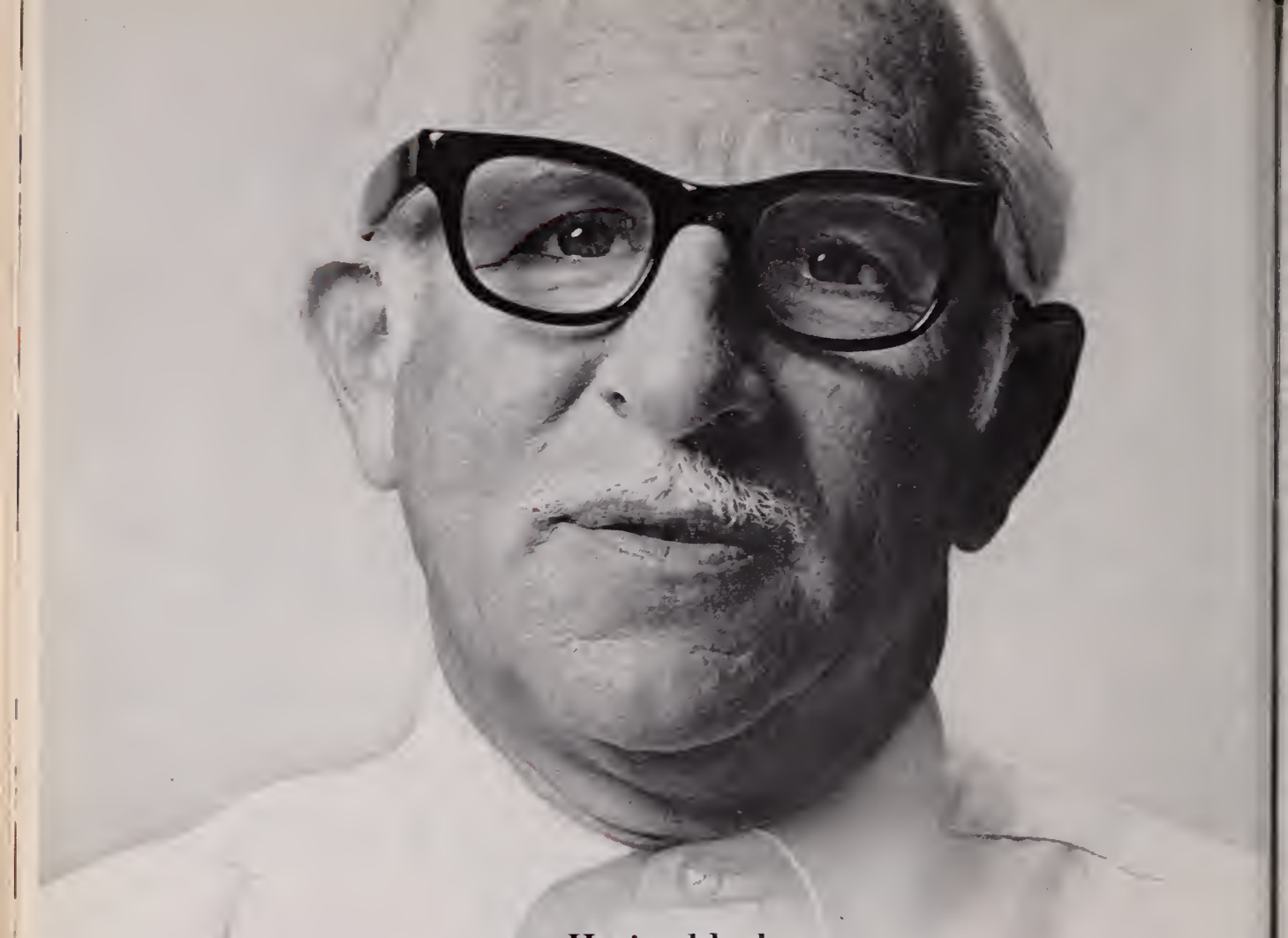
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Effectiveness: Because its antibacterial component is DECLOMYCIN Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. C stant observation is essential. If new infections appear, appropr measures should be taken. In infants, increased intracranial pres with bulging fontanels has been observed. All signs and symptoms l disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, d rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculo ular and erythematous rashes; a rare case of exfoliative dermatitis been reported. Photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Trans increase in urinary output, sometimes accompanied by thirst (r Hypersensitivity reactions—urticaria, angioneurotic edema, anaphyl Teeth—dental staining (yellow-brown) in children of mothers given drug during the latter half of pregnancy, and in children given the d during the neonatal period, infancy and early childhood. Enamel h plasia has been seen in a few children. If adverse reaction or idio crasy occurs, discontinue medication and institute appropriate ther Demethylchlortetracycline may form a stable calcium complex in bone-forming tissue with no serious harmful effects reported thus in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Shoul given 1 hour before or 2 hours after meals, since absorption is impa by the concomitant administration of high calcium content drugs, f and some dairy products. Treatment of streptococcal infections sh continue for 10 days, even though symptoms have subsided.

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THE JOURNAL OF THE
Florida Medical ASSOCIATION
FEBRUARY, 1969 • VOLUME 56 • NUMBER 2

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Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enteroc pruritus ani. Skin—maculopapular and erythematous rashes; case of exfoliative dermatitis has been reported. Photosens onycholysis and discoloration of the nails (rare). Kidney—rise in apparently dose-related. Transient increase in urinary output, s times accompanied by thirst (rare). Hypersensitivity reactions- caria, angioneurotic edema, anaphylaxis. Teeth—dental stainin low-brown) in children of mothers given this drug during the latt of pregnancy, and in children given the drug during the neonata od, infancy and early childhood. Enamel hypoplasia has been s a few children. If adverse reaction or idiosyncrasy occurs, discor medication and institute appropriate therapy. Demethylchlor cycline may form a stable calcium complex in any bone-forming with no serious harmful effects reported thus far in humans.

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

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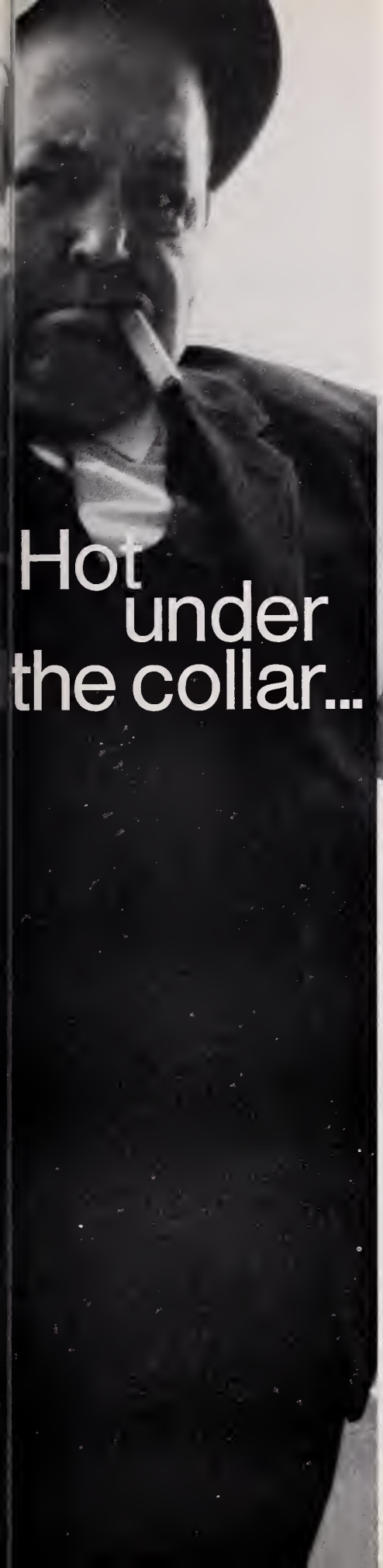
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COLD FRONTS

The cover picture shows the advancing edge of clouds of a "cold front" passing over Florida a few weeks ago. Mr. Samuel Bell Jr. of Miami, an amateur photographer, caught this view of a pelican and gull discussing the situation.



Hot under the collar...



high under the cuff.

Sometimes
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chlorthalidone	50 mg.
reserpine U.S.P.	0.25 mg.

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For brief summary of prescribing information, see next page.

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Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs.
Use in pregnancy: Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue therapy with this agent two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.
Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Severe salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients.
Adverse Reactions: The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible.
Average Dosage: One tablet daily with breakfast.
Availability: Pink, single-scored tablets in bottles of 100 and 1000.
(B)46-600-C
For details, please see complete prescribing information.

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RE-6392



Perspective

In these days of inflation, increased interest rates, civil unrest, rebellion of youth, wars and rumors of wars, loss of prestige abroad, "M" movies, the price of gold, crime and lack of moral restraint, it has been refreshing to realize that all is not lost—at least technologically.

The fact that we were able to send three men to orbit the moon at a distance of 65 miles away and send back excellent pictures of our tired old planet from 200,000 miles away should give us all renewed courage. It also should make us feel quite humble to see ourselves in perspective: just another world—one of many. One could not tell by seeing these pictures whether or not the earth is even inhabited.

I think the main lesson to be learned by us laymen is first, the ability of some of us to do the impossible after appropriate ground work, and second, as Robert Burns cited, "To see ourselves as others see us."

Maybe some of the seeming impossible problems of organized medicine can some day be solved. Some days I feel that we will have to get in orbit to do it.

Happy Washington's birthday!

Jack A. Cleveland



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Tetrex-F®

(tetracycline phosphate complex-nystatin)

Whenever monilia may threaten tetracycline therapy

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A. H. F. S. Category 8:12**

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It's almost as if you were there to give an injection of penicillin



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Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K® (Potassium Phenoxymethyl Penicillin Tablets, U.S.P.), 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K® (potassium phenoxymethyl penicillin, Lilly), Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567A]

930134

Additional information available to physicians upon request.

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Arthritis
A Clinical Diagnosis

Louis M. Sales, M.D.

Coincident with a host of newer therapies and modalities of therapy for the various arthritides and collagen diseases has been the development of a battery of diagnostic studies designed to identify and individualize the various syndromes and diseases falling within these broad classifications. In the early stages of these conditions when laboratory and x-ray assistance would be most welcome, the aid they offer is nebulous; therefore, the clinician must depend upon his judgment and acumen in making a differential diagnosis. For this reason, it was believed that a discussion of the clinical diagnosis of arthritis might have a place.

In the classical case of rheumatoid arthritis, clinical grounds alone usually are sufficient for the diagnosis. In less characteristic cases or earlier stages, the diagnosis becomes largely one of exclusion and a host of other diseases must be considered. (See list below).

In addition, other diseases by referred pain or metabolic disturbances manifested in joints or nearby structures may be confused with arthritis. Among these which may either mimic or be mimicked by the various arthritides are bronchogenic carcinoma, hyperparathyroidism, occlusive vascular disease, multiple myeloma, arteriovenous fistula, hypernephroma, aortic aneurysm, herniated intervertebral disc, ochronosis and various neurological disturbances. Fortunately there are clues which assist in the proper differential diagnosis—sex, age at onset, distribution of joint involvement, and mode of progression of the process.

Gouty arthritis
Rheumatic fever
Pyogenic arthritis
Systemic lupus erythematosus
Tuberculous arthritis
Reiter's syndrome
Sarcoidosis
Osteoarthritis
Ankylosing spondylitis
Psoriatic arthritis
Leukemia
Foreign protein reaction (serum sickness)
Pseudogout
Scleroderma
Hypertrophic osteoarthropathy
Palindromic rheumatism and intermittent hydrarthrosis
Traumatic joint disabilities
Polyarteritis nodosa
Arthritis with ulcerative colitis
Infectious arthritis
Neuropathic joint disease
Localized and generalized fibrositis
Dermatomyositis
Psychogenic rheumatism
Tumors of joints and surrounding bony and soft tissue structures

Sex

Sex assists in the differential diagnosis. Rheumatoid arthritis and disseminated lupus occur approximately three times as frequently in women as in men. Osteoarthritis, at least erosive osteoarthritis, is a disease largely of middle-aged and elderly women and may be extremely difficult to differentiate from rheumatoid arthritis. Scleroderma and dermatomyositis predominate in women. Rheumatoid spondylitis, gout and Reiter's disease are almost exclusively diseases of men. Polyarteritis nodosa occurs much more frequently in men. Sarcoidosis, while showing no appreciable sex difference, occurs much more frequently in the Negro than in the white. The other conditions which must be considered show no helpful variation in distribution between the sexes.

Age at Onset

Rheumatoid arthritis classically has two peaks of onset: namely, age groups 20 to 40 and 55 to 65. Systemic lupus erythematosus and polyarteritis nodosa also peak between ages 20 and 40. Gout almost invariably manifests itself, at least in the first attack, by age 45. Osteoarthritis, (barring trauma), multiple myeloma and scleroderma increase in incidence progressively from age 40 on. Dermatomyositis has two age peaks, one in the very young, and the other in age past 40. Incidentally, a careful search should be conducted for an occult neoplasm in dermatomyositis first manifesting itself in adults. It is usually found in 40% to 50% of cases.

Reiter's syndrome, ankylosing spondylitis, arthritis with ulcerative colitis and regional enteritis, psoriatic arthritis, sarcoidosis, rheumatic fever, hemophilia and syringomyelia (as a cause of neuropathic bone disease) all manifest in the second or third decade of life at the latest. Acute pyogenic, infectious and tuberculous arthritis also are more common in the young, but the element of trauma and activity must be considered. Some of the other neuropathic bone diseases, such as tabes and diabetes, increase in incidence as age advances. Primary tumors of joints in areas immediately adjacent to the joint are more common in the young: however, metastatic bone disease, Paget's disease, vascular anomalies and referred types of pain appear more frequently with advancing years.

One word of caution about juvenile rheumatoid arthritis. This may appear at the same age and in the early stages be completely indistinguishable clinically and by laboratory procedures from rheumatic fever. It is only with passage of time and failure of complete resolution in the involved joints that the differential diagnosis can be made.

Distribution of Joint Involvement

Rheumatoid arthritis classically involves the smaller joints. The proximal interphalangeal joints, metacarpophalangeal joints, wrists, knees and ankles are almost invariably involved. When the spine is involved, usually the apophyseal joints of the cervical spine are most severely affected. Narrowing of disc spaces with little or no osteophytosis, particularly at C2 - 3 and C3 - 4, is fairly common as also are multiple subluxations at C2 - 3, C3 - 4, C4 - 5 and C5 - 6.

In at least half the cases, gout classically strikes first the metatarsophalangeal joint of the big toe. In an additional 25% of cases, the ankle or knee may be the first joint affected.

Rheumatic fever will involve the knee or ankle, or both, in at least 75% of cases. Systemic lupus erythematosus manifests with a distribution identical with that of rheumatoid arthritis. Reiter's syndrome, unlike rheumatoid spondylitis which also involves the sacroiliac joints early, also involves the knees, ankles and feet. Osteoarthritis will affect particularly the hips, shoulders, knees, lumbar vertebrae, lower cervical vertebrae and the terminal interphalangeal joints of the fingers, but almost never the wrists, metacarpophalangeal joints or the feet except for a "bunion joint." Pseudogout, unlike gout which involves smaller joints particularly, will involve large joints and especially the knee. The neuropathic joint diseases vary. While diabetic neuropathy resembles myelomeningocele and congenital insensitivity to pain in affecting particularly the ankle, tarsal and tarsometatarsal joints, tabes will involve the knee, hip, ankle, lumbar and lower dorsal vertebrae. Syringomyelia will affect the shoulder, elbow and cervical vertebrae. The other diseases mentioned do not show any diagnostic predilection for a particular joint or group of joints.

Mode of Onset

A careful study of mode of onset and progression of symptomatology frequently may suffice to establish the diagnosis. Acute gouty arthritis is a classical example. The involved joint is struck suddenly with exquisite and intense inflammation usually within a matter of hours; the relief of

symptoms on a full dose of colchicine is prompt. The big toe is the first area involved in 70% of initial attacks. The first attack is usually monoarticular and in the interim between attacks there is usually complete freedom from symptoms during the early pretophaceous stage. Family history frequently reveals other cases of gout. Tophi develop in about half the patients in the later stages of the disease. Ankylosis is rare. Olecranon bursitis is a common finding. Symmetrical joint swelling may be present but this is unusual.

In rheumatoid arthritis, on the other hand, onset of the disease is usually insidious. Symptoms frequently continue for months or years without remission. Joint swellings are usually symmetrical with the wrists, knees, ankles, hands, shoulders and elbows most commonly involved in that order. The pain is usually not as intense as that of gout and is frequently relieved by rest. The family history may be equivocal. Olecranon bursitis is not a common finding although subcutaneous nodules and ankylosis of involved joints frequently occur. Muscular atrophy is usually present and generalized osteoporosis as revealed by x-ray. Other related symptoms may include neuropathy, moderate anemia, lymphadenopathy of varying degrees and in some instances splenomegaly with signs of hypersplenism, iritis, and even carditis and pulmonary involvement.

Rheumatic fever classically has its first onset at under age 15, is preceded by a sore throat in about 60% of the cases, responds dramatically on salicylates with complete relief of pain and return of temperature to normal. The x-ray studies reveal no abnormalities. Permanent joint damage does not occur. The synovial fluid remains sterile and the EKG frequently shows abnormalities.

In pyogenic arthritis bone destruction may occur within a period of 14 days or less and permanent joint damage may be significant. There is no response to salicylates; response to specific antibiotics is excellent. The synovial fluid usually will demonstrate bacteria by smear or culture and the blood count a characteristic leukocytosis. Unless the bacterial agent is a hemolytic streptococcus, an antistreptolysin titer will be normal. Monoarticular arthritis is most common and the signs of an acute inflammation will be present. Infectious arthritis may be confusing unless the general picture is carefully evaluated. Usually the finding of generalized systemic infection makes the diagnosis clear, and the arthritis most usually subsides as the primary disease abates.

Systemic lupus erythematosus may begin with pain and swelling in multiple peripheral joints. Questioning usually elicits a history of treatment for pneumonia, pleuritis, kidney disease, heart trouble, peripheral neuropathy, psychosis, convulsions, cranial nerve palsy, anemia and biologically false positive VDRL. In other words, disseminated lupus being a disease of multi-systems frequently manifests itself by involvement of various organs at different times. This, plus the presence of a positive lupus erythema test, skin rash and idiopathic thrombocytopenic purpura or hemolytic anemia or both, frequently help to make the diagnosis.

Tuberculous arthritis usually involves only one or two joints, and the inflammation is characteristically indolent and progressive. Occasionally multiple joint involvement occurs, suggesting rheumatoid arthritis, but negative results from the latex fixation test and positive culture from the synovial fluid and synovial biopsy should help to resolve this point.

Reiter's syndrome classically presents with urethritis, iritis and arthritis with or without balanitis, diarrhea and keratodermia blennorrhagica. At times, however, eye and skin lesions are lacking and urethritis may be rather mild. In these patients asymmetrical joint involvement and negative latex fixation tests usually will assist in differentiating this condition from rheumatoid arthritis.

Sarcoidosis may begin with multiple joint involvement progressing even to the point of deformity; usually, however, fairly characteristic skin lesions are present. Uveoparotid fever, hilar potato nodes with pulmonary involvement, hypercalcemia with marked hyperglobulinemia and evidence of multiple organ involvement (pituitary, thyroid, adrenal, testes or ovaries, liver, pancreas and heart) will provide the clue, and biopsy or positive Kveim test will confirm the diagnosis.

Erosive osteoarthritis in the female may occur with fairly severe pain and symptomatology suggesting rheumatoid arthritis. The involvement of the distal rather than the proximal interphalangeal joints usually should give the clue in these cases.

Ankylosing spondylitis begins characteristically in the sacroiliac joints bilaterally and spreads in sequence to the lumbar, dorsal and cervical areas. Hip and shoulder involvement does occur and in these joints the disease may be progressive, leading to permanent damage and some confusion with rheumatoid arthritis. Involvement of more peripheral joints, except for the knees, is rare. In

rheumatoid arthritis involvement of the sacroiliac joints occurs late.

Psoriatic arthritis, unlike rheumatoid arthritis, manifests itself with asymmetrical involvement of the distal interphalangeal joints. Subcutaneous nodules are absent and tests for rheumatoid factors are negative. In unusual cases where the arthritis appears prior to the skin lesions, a careful examination of the nails may reveal pitting or other psoriatic changes.

Leukemia, particularly in children, occasionally presents with joint pain. Usually this should not prove difficult diagnostically.

Serum sickness presents no problem when accompanied by urticaria. At other times, acute pain in multiple joints may be difficult to distinguish from acute rheumatoid arthritis, particularly when the rheumatoid factor is absent. A definite diagnosis may be possible only after observing the patient for several weeks.

Chondrocalcinosis (pseudogout) in older individuals, beginning as an acute attack of gout involving a single joint and mimicking an acute gouty arthritis, may be caused by the deposition of calcium pyrophosphate crystals in the joint. Diagnosis depends upon finding weakly positive birefringent crystals in the aspirated synovial fluid and calcium deposits in the articular cartilage by x-ray.

Scleroderma is frequently treated for years as rheumatoid arthritis because of the patient's complaint of pain and stiffness in the hands, feet or other areas of the body. The correct diagnosis becomes apparent only when the passage of time brings, instead of characteristic joint deformities, infiltration and induration of the subcutaneous tissues of the hands and feet, difficulty in swallowing, chewing or talking. Additional diagnostic assistance is provided by a history of Reynaud's phenomenon, occasional presence of calcinosis both circumscripta and universalis, and the absence of peristalsis in the esophagus as seen on barium swallow. The presence of a small triangular heart shadow with diminished cardiac pulsation by fluoroscopy, fairly characteristic pulmonary changes by x-ray, characteristic small bowel pattern coupled with malabsorption syndrome, typical trophic changes in the terminal phalanges, peripheral neuropathy, and in many instances changes of progressive renal involvement, complete the picture. In these instances, a renal biopsy usually proves diagnostic.

Evolution of the Disease

Unfortunately, by the time evolution of the disease makes the diagnosis evident, it may be too late to salvage some of the diseased joints or vital organs. For this reason, the physician must be constantly alert to a changing spectrum of symptoms and interpret them accordingly.

Summary

Great strides forward have been taken in recent years in the diagnosis and differentiation of the arthritides and collagen diseases by means of laboratory procedures and x-ray. Nevertheless, these still prove of little help in many cases when they are needed most, i.e., in early stages of the disease. It is here that clinical judgment and acumen again must prevail. An attempt has been made to differentiate this group of diseases on the basis of sex, age at onset, distribution of joint involvement and the mode of onset.

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Lactation Suppression Utilizing Norethynodrel With Mestranol

Frank S. Billingsley, M.D.

Because of the continued reluctance of mothers to breast-feed their infants, physicians are prompted to search for an effective lactation suppressant. Multiple preparations have been utilized, but to date the ideal medication for suppression of lactation and its concomitant deleterious symptoms has yet to be found. Adverse effects, such as masculinization, mastodynia, sterile abscesses at the injection site, uterine bleeding and generalized edema, have been reported in the literature.[1,2] Determination of the efficacy of norethynodrel as a lactation suppressant was the purpose of this study.

Method and Materials

This investigation was made on 225 consecutive obstetrical patients at the Naval Hospital, Jacksonville, Florida. Prior to this study, 10 mg. norethynodrel with mestranol (Enovid, Searle) had been administered in varying dosages ranging from 10 mg. daily for three days to 10 mg. twice a day for seven days. A principal action of norethynodrel is inhibition of the gonadotrophic hormones.[3] An optimal dosage of 10 mg. daily for five days was determined by experimentation over a 12 month period. A double-blind study could not be performed because of my inability to obtain placebos identical with the norethynodrel tablets and, therefore, the study was performed in the manner outlined. One hundred fifty consecutive patients who preferred to bottle-feed their infants were given norethynodrel 10 mg. daily for five days, commencing as soon after delivery as the patient could tolerate oral medication. The subsequent 75 patients—the controls—were given one placebo daily for five days. We were unable to match the number of experimental patients with an equal number of control patients because of the hue and cry from the hospital staff due to increase in need for attendant care to the breast-engorged, symptomatic patients in this latter group. Neither ice packs, breast binders nor tight support were utilized in the norethynodrel group.

All patients were appraised by the ward medical officer on the second, third and fourth days postpartum for breast pain, engorgement, lactation, side effects of medication and needed analgesics administered specifically for breast problems. Multiparous patients remained in the hospital three days, and primiparas four. At time of discharge, the patients were given additional pills to round out five days of therapy. All patients also were given a questionnaire to complete at home and to return either by mail or at the time of their six-weeks follow-up. The questionnaire requested their own appraisal of breast engorgement, lactation, breast pain, duration of lochia rubra, onset of menstruation, efficacy of pills and any comments.

Results

The results of the physician evaluation of the norethynodrel group indicate that the hormonal medication was 98.7% effective in diminishing breast pain and engorgement and 99.4% effective as a lactation suppressant (Table 1).

Breast pain and engorgement to a considerable degree were noted in two patients (1.3%) who were given norethynodrel, and one of these lactated profusely. A review of the records of these two patients disclosed that both women had delivered in the late evening and medication was not commenced until the following morning. In the control group, 45.3% of the patients had severe breast pain, 56% had severe breast engorgement and 24% had severe lactation (Table 1). Analgesics were required in only 1.3% of the norethynodrel-mestranol treated group, but were required in 46.6% of the controls (Table 1).

Evaluation by the physician during the hospitalization showed that of the treated group,

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The opinions or assertions contained herein are the private ones of the author and are not to be construed as official or as necessarily reflecting the views of the medical department of the Navy or of the naval service at large.

94% suffered no breast pain, 95.4% no breast engorgement and 91.4% experienced no lactation. In the control group, 36.1% had no breast pain, 29.6% no breast engorgement and 42% no lactation (Table 1).

Table 1.—Evaluation by Physician

Symptoms	Norethynodrel (150 patients) Percent	Placebo (75 patients) Percent
Breast pain		
None	94.1	36.1
Slight to moderate	4.6	18.6
Severe	1.3	45.3
Breast engorgement		
None	95.4	29.6
Slight to moderate	3.3	14.4
Severe	1.3	56.0
Lactation		
None	91.4	42.7
Slight to moderate	8.0	29.3
Severe	0.6	24.0
Analgesics	1.3	46.6

Patient Evaluation

The results of the survey by questionnaire indicate that norethynodrel utilized in the manner described is effective in suppressing lactation and preventing the associated breast engorgement and pain.

The yield of questionnaires returned by the norethynodrel study group was 79 (52.6%); the control group returned 35 (46.6%).

In almost all cases, the patient completed the questionnaire before entering the doctor's office, so that the doctor's presence would not influence the patient's answers. In the norethynodrel group, 93.6% affirmed that the medication was of moderate to great help and 6.3% said that it helped slightly. Of the control group, 31.5% stated that the medication was of moderate to great help and 68.5% said that either it did not help or that it gave only slight benefit.

Of the norethynodrel group, 87.4% had slight to no breast pain, as was true of 42.6% of the controls. Breast engorgement was slight to none in 79.7% of the norethynodrel group and 28.7% of the controls. Of the norethynodrel group, 68.4% had slight to no lactation whereas 45.7% of the controls elicited slight or no lactation.

In the norethynodrel study group, the majority who experienced moderate to marked breast engorgement and pain stated that this sign occurred after they stopped taking their pills.

Thirty-nine patients (49.5%) of the norethynodrel study group volunteered comments on the questionnaire. Thirty-seven (94.9%) commented favorably on the effects of the medication. Two (5.1%) were critical—these were the same two patients who were delayed in commencing their medication. Twelve patients (34%) of the control group volunteered comments and eight (66.6%) were critical.

At the time of the six-weeks postpartum check-up, menses had not been resumed in 68% of the norethynodrel group and 80% of the controls.

Discussion

The study was undertaken in February 1967, norethynodrel having been utilized intermittently in varying dosages during the preceding 12 months with consistently excellent results. In spite of the fact that ours was not a double-blind study, it was believed that the results were meaningful and that the data merited reporting.

The incidence of natural suppression in other series of postpartum patients evaluated for breast engorgement has been reported at 30%,[4-6] a figure comparable with the placebo group in the present study (29.5%). The physician evaluation of no breast engorgement in 95.4% of the treated patients prior to leaving the hospital gives as good as or superior results to comparable studies with other medications (Table 1).[1,6,8,9]

From patient evaluation after leaving the hospital and stopping the medication, we find an additional increase in the percent of engorgement and lactation. Subjective bias may well have entered the evaluation of the degree of breast engorgement by the control group, as there is a disparity in the comparison of moderate to severe breast engorgement and breast pain, 20.3% to 12.6%. In most previous studies, however, extensive patient evaluation was not obtained,[6-9] and it is considered significant that 93.6% of the norethynodrel group indicated that the medication helped moderately to greatly. In the light of information received as a result of the patient evaluation, increasing the length of administration

of norethynodrel to six days has improved the results.

The best results are obtained from lactation suppressants when the medication is given as soon after delivery as possible.[7] We now administer norethynodrel to all patients who plan to bottle-feed their infants before these patients leave the delivery room.

The percentages of patients in whom there was cessation of lochia rubra, in both the study and control groups, did not differ significantly. Recurrence of menses, however, may have been earlier in the norethynodrel group.

No adverse side effects were experienced by any patient in the norethynodrel group. Perhaps postpartum patients have a physiological tolerance to this five-day 10 mg. daily dosage, for nausea and vomiting do not occur.

Summary

In a study to determine the efficacy of norethynodrel as a lactation suppressant, 225 postpartum non-nursing patients were evaluated. Norethynodrel was given to 150 consecutive patients, 10 mg. daily for five days. The subsequent 75 patients were given a placebo. Evaluation of the effects of the drug was determined by the physician in the hospital and through results of a questionnaire given the patient to complete and return after leaving the hospital. Norethynodrel was markedly superior to the placebo in all parameters considered in both the physician and patient evaluations.

Acknowledgements

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References

1. Markin, K. E. and Woest, M. D.: A Comparative Controlled Study of Hormones Used in Prevention of Postpartum Breast Engorgement and Lactation, Am. J. Obst. & Gynec. 80:128, 1960.
2. Shubech, F.: Breast Problems in the Puerperium, Clinical Obst. & Gynec. 5:701, 1962.
3. Kistner, R. W.: Steroid Compounds with Progestational Activity, Post Graduate Medicine 35:225, 1964.
4. Martin, D. J.: Puerperal Lactation, Physiology and Suppression, G. P. 30:79, 1964.
5. Newton, M. and Newton, N.: The Normal Course and Management of Lactation. Clinical Obst. & Gynec. 5:44, 1962.
6. Stein, W. W.: An Evaluation of a Combination of Testosterone Enanthate with Estradial Valerate (Deladumone) for the Inhibition of Lactation, Am. J. Obst. & Gynec. 76:108, 1958.
7. Iliya, F. A.; Safon, L. and O'Leary, J. A.: Testosterone Enathate and Estradial Valerate for Suppression of Lactation, Am. J. Obst. & Gynec. 27:643, 1966.
8. Jones, H. E. and Tanner, J. E.: Suppression of Lactation: Use of a Single Androgen—Estrogen Injection, Am. J. Obst. & Gynec. 19:51. 1962.
9. Roser, D. M.: Breast Engorgement and Postpartum Fever, Am. J. Obst. & Gynec. 27:73, 1966.

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Correction of Ametropia in Skin and Scuba Divers

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Skin and scuba diving not only are fascinating sports but they also are tools utilized more and more for scientific, commercial and military purposes. Millions of individuals throughout the world participate in one or more forms of diving. When done properly, diving is one of the safest of activities; when done otherwise the outcome can be fatal.[1] One factor that helps to make diving safer and enables scientists, engineers and the military to do a better job is to be able to see as clearly as possible underwater. It is the purpose of this paper to review the types of diving in existence, to describe the necessity for and the four methods of placing an air space in front of a diver's eyes, to explain the three most pronounced underwater optical effects that occur when an air space is placed in front of a diver's eyes, and to discuss the current ten methods of correcting ametropia* in skin and scuba divers, thereby enabling them to see more clearly underwater.

Three types of diving are in existence today: (1) Hard Hat Diving, (2) Skin Diving and (3) Scuba Diving. Hard hat diving is essentially a commercial type of diving wherein the diver wears a metal helmet which is attached to a canvas suit and has an air hose which is connected to an air compressor on the surface boat. Skin diving is the method of diving in which the diver utilizes basically a mask, snorkel and flippers. Scuba diving is the method of diving in which the diver utilizes basically a mask, snorkel, flippers and self-contained underwater breathing apparatus, otherwise known as scuba.

For man to see clearly underwater it is necessary to place an air space in front of his eyes. The reason for this is that water and the cornea have virtually the same index of refraction (1.33) and, therefore, the cornea is "lost" underwater with regard to its refractive properties until an air space is placed in front of it (Figs. 1-3).

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*Any condition in which parallel rays are not focused on the retina and/or the refraction of the eye is not normal.

Actually, Duane in 1959 demonstrated that by placing a strong spherical lens (64.5 diopter in air) made of flint glass (n=1.7) in front of the submerged human eye, a visual acuity of 20/20 was obtainable.[2] The disadvantages of a poor visual field (20° binocularly) and the irritative effect of sea water bathing the eye (fresh water is nonirritative) make impractical this method of obtaining clear vision underwater. Should a diver nonetheless want this lens for a specific purpose, his refractive error correction could be incorporated into the system.

Before discussing the four methods of placing an air space in front of a diver's eyes, the three most pronounced effects that occur underwater when any air space with a plano surface is placed in front of a diver's eyes will be explained:

An object appears to be one-fourth closer to the observer. The equation for this phenomenon is $(f') = 1/n \times f$ where (f') equals the apparent distance of the object from the observer, f equals the actual distance of the object from the observer and n equals the index of refraction of water, or 1.33 (4/3),[3] therefore, $(f') = 3/4$ f (Fig. 4).

An object is 33% magnified. The equation for this phenomenon is $Q' = nQ$ where Q' equals the angle of the apparent object, Q equals the angle of the actual object, and n equals the index of refraction of water, or 1.33 (4/3);[4] therefore, $Q' = 4/3$ Q or image size = 4/3 object size (Fig. 5).

Visual fields are limited by the total reflection that takes place at the critical angle of 48.5° and, in certain instances, by the opaque side walls of the air space (Fig. 6). Binocularly, the maximum visual field that can be obtained with a plano interface thus is 97°. The normal vertical binocular visual field is about 130° and the normal binocular lateral visual field is about 200.°[5]

There are basically four methods of placing an air space in front of diver's eyes: hard hats (helmets), goggles, face masks and skin diver contact air lenses.

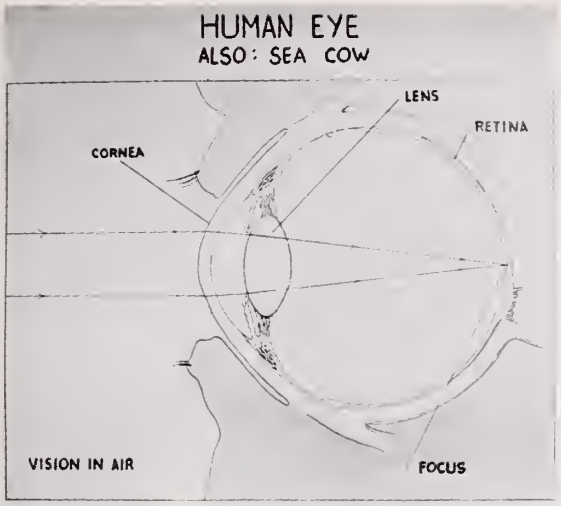


Figure 1

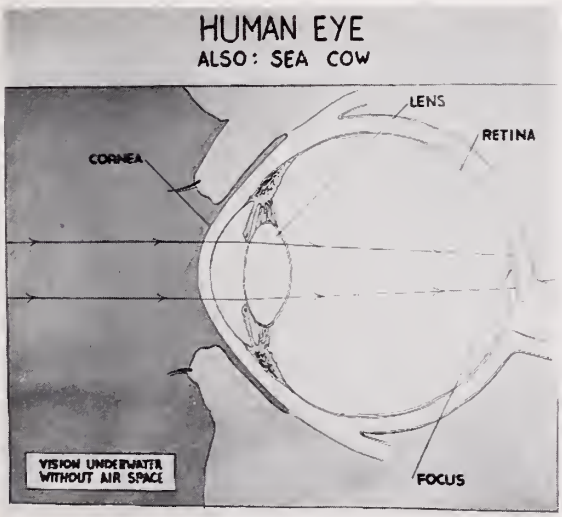


Figure 2

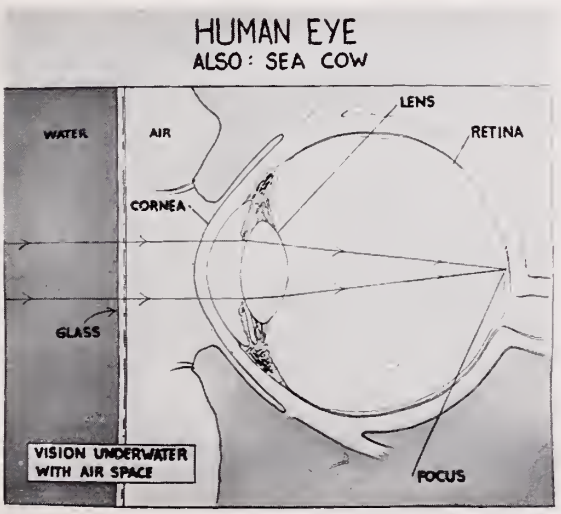


Figure 3

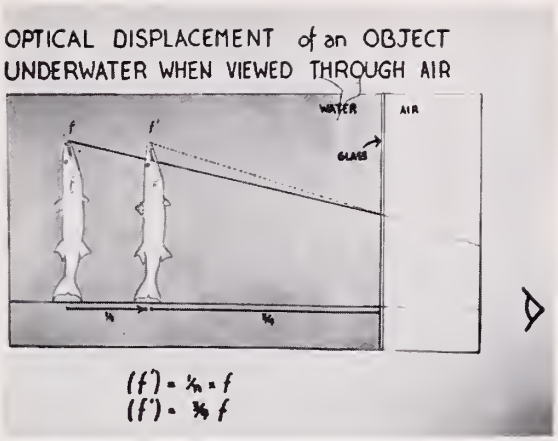


Figure 4

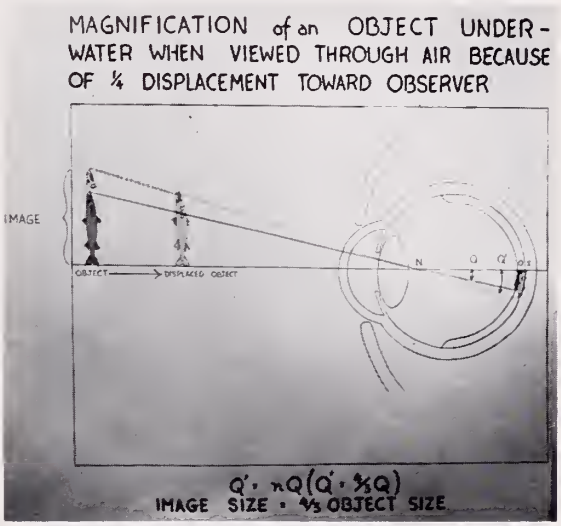


Figure 5

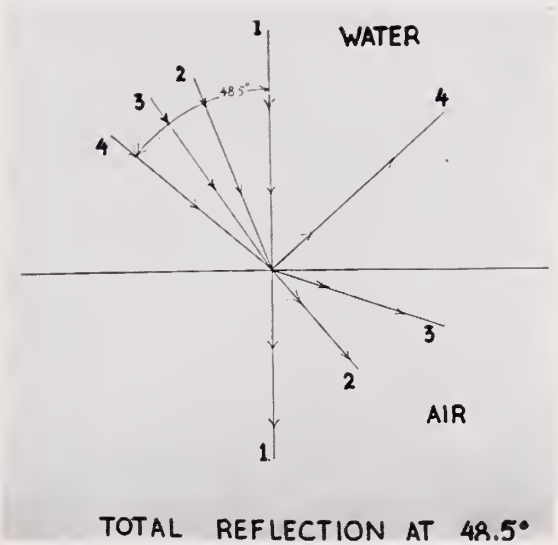


Figure 6

Hard Hats (Helmets).—The helmet was introduced into the diving world by August Siebe in 1819.[6] It is made of spun copper with brass fittings and has several round or ellipsoid port holes with plano glass through which the diver views the underwater world. The average diameter of the port hole is 4½ inches.

Goggles.—Goggles were introduced into the western world in 1936 by Fernez.[7] He obtained the idea from the Japanese pearl divers when visiting in Italy in 1932 (Fig. 7). However, Ibu Batuta, the medieval Moroccan traveler, described the use of transparent turtle shell goggles in 1331 by Arab divers in the Persian Gulf. Present day goggles are generally made of plastic lenses, approximately 44 mm. in diameter, and have rubber side walls. Goggles cover only the eyes. They have two serious disadvantages: (a) pressure cannot be equalized under the goggles (except for specially designed ones with air sacs worn by the *ama* of Korea and Japan) and (b) the visual fields are contracted to 60° (which is a loss of over two-thirds of the normal field).

Face Masks.—Face masks were introduced into the diving world in 1938 by Talliez.[7] Essentially there are four types: (a) Standard oval type, (b) Wrap-around type, (c) Full face type and (d) Rebikoff Visiorama. The standard oval, the wrap-around and the Rebikoff Visiorama masks cover the eyes and nose but not the mouth.

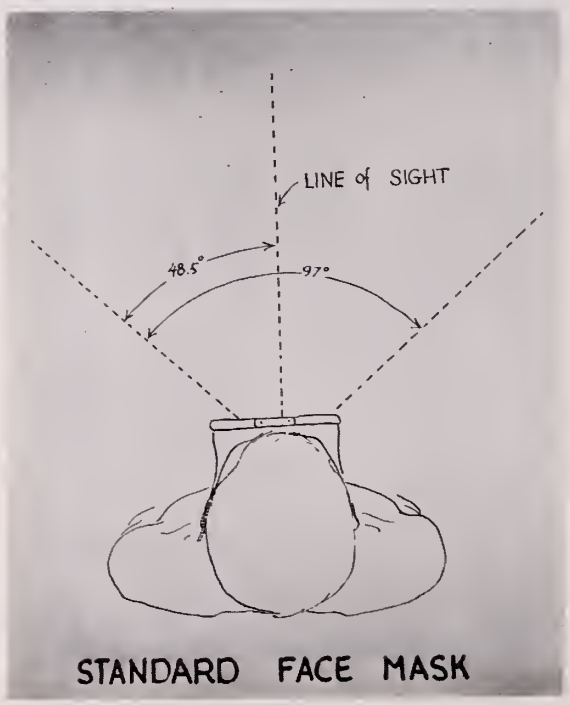


Figure 7

The air pressure under these three types can be equalized by the diver as he descends simply by exhaling a little air through the nose. The full face mask is used occasionally in some commercial operations since it can facilitate underwater communications, but it has a disadvantage in that if it breaks or is unseated the diver loses his air supply at the same time. The Rebikoff mask has two lenses as well as the air space in front of the diver's eyes. This combination eliminates the one-fourth displacement and 33% magnification underwater; however, it has three disadvantages: (a) a contraction of the binocular lateral visual field to 80°, (b) a marked distortion in the periphery of the lens system which causes a marked vertigo and (c) the smallest interpupillary distance that can be obtained is 63 mm. and decentering is not applicable to the lens system.

The most popular face masks are the standard oval types (Fig. 8). The wrap-around masks (produced by Scubapro, Nemrod and U.S. Divers) give a binocular lateral visual field of 200° because of the side plates which are no longer plano to the front of the eye; however, they produce a marked image jump in the periphery. A few curved face plates for the standard oval mask still are manufactured. In general they produce an unsatisfactory distortion underwater. The glass of the flat face plate generally is tempered, which is a desirable feature. One company produces laminated face plates which have a marked tendency to separate. Plastic face plates also are manufactured but are unsatisfactory because of the near impossibility of keeping them from fogging and also because of their marked tendency to become easily scratched.

Skin Diver Contact Air Lens.—The SCAL is an ordinary plastic scleral contact lens to which a small plastic encased air space has been attached on its front surface. The disadvantages of SCAL are: (a) the binocular lateral visual field is still contracted (120° according to my measurements) 157° according to Faust and Beckman,[8] (b) in sea water a marked conjunctival irritation is present,[8] (c) halation and blurring occur[8] and (d) individual measurements and adjustments are necessary, which places the cost in the neighborhood of $300 (a standard oval face mask costs about $6.95). The British frogmen gave SCAL an extensive trial during the Korean conflict and discarded them because of the conjunctival irritation and because they did

not seem to possess any military advantage over the standard oval face mask.[9]

Having examined the four methods of placing an air space in front of a diver's eyes in order for him to see clearly underwater, let us now examine the current ten methods of correcting ametropia in skin and scuba divers (including one short reference to the hard hat diver).

Standard Spectacles.—These are used by the hard hat diver. Cable temples will prevent the spectacles from falling off. If library or skull temples are used, an eyeglass holder should be attached. Standard spectacles cannot be used with face masks because the spectacle temples cause water leakage to occur under the rubber side walls of the mask.

Pince Nez Spectacles.—These are attached to the bridge of the nose by a clamp and are worn in conjunction with a face mask. Their main disadvantage is that they tend to become easily dislodged while diving, especially when the mask becomes unseated.

Face Masks With Apertures for Lenses.—One company, Dacor, manufactures a face mask called the "Vedo" in which an appropriate corrective lens may be inserted. A neoprene o-ring acts as a gasket to prevent water leakage. To effect a perfect seal so that leakage does not occur, it has been found necessary, especially with astigmatic lenses, to make the corrective lens a smaller diameter and then bond it to the plano lens present in the mask. The two main disadvantages are that the binocular lateral visual field is contracted to 60° and the pupillary distance is fixed at 75 mm. and, therefore, the optician must remember to decenter the lenses when indicated.

Face Masks With Lens Holder.—In this method the corrective lens is placed into a plastic frame which is then inserted into the mask either with a suction device or adjustable stays. These have many disadvantages: (a) they are not adjustable to all face masks, (b) when fogging occurs it does so on both surfaces of the lenses, making it very difficult to defog while underwater, (c) they frequently get out of alignment and (d) the interpupillary distance is fixed and the optician must remember to decenter the lenses when indicated.

Face Masks With Lenses Ground Into the Plate.—One company, Scubapro, manufactures a face plate that has minus lenses in ½ diopter gradients up to minus 10 diopters ground into the plate. The same power is in both lenses. The disadvantages are: (a) only minus corrections equal for both eyes can be ground into the face plate, therefore hypermetropia, anismetropia, astigmatism and presbyopia cannot be corrected, (b) the interpupillary distance is fixed at 67° and cannot be altered and (c) the plates are not made of safety glass.

Face Masks With Bonded Lenses.—Any face mask, whichever one the diver prefers, may have corrective lenses bonded to the inner surface of the face plate. Plus lenses, minus lenses, astigmatic lenses, single vision lenses and bifocals (trifocals have been found not to be practical) may be bonded to the face plate. It is essential that the anterior surface of the lenses be plano and the posterior surface of the face plate be plano. Many face plates have irregularities and these must be ground down to plano (a special grinding instrument is necessary for this process). Large lenses up to 72 mm. in diameter generally are used. The correct interpupillary distance is easily obtained. Vertex distance dissimilarities between the face mask and phoropter (or trial frame) are easily corrected. Three types of bonding agents presently are in use. (a) Canadian balsam. (b) General Electric sealent and (c) optically clear epoxy. Experience with over 500 masks incorporating bonded lenses has shown that the optically clear epoxy is far superior to the other two agents. When using epoxy, the

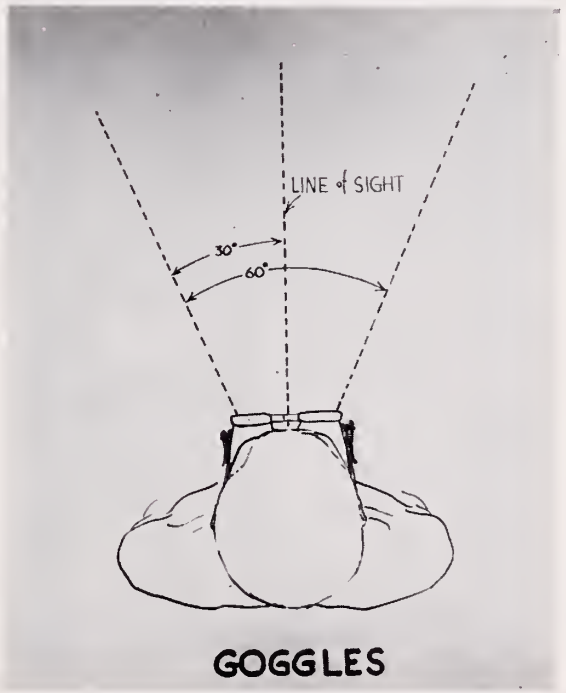


Figure 8

lenses have remained bonded indefinitely; they remain crystal clear and marked temperature changes do not affect them. As with a face mask plate, if the lenses are kept clean with any of the synthetic laundry detergents which leave no residual film or, better yet, commercial lens cleaner preparations such as Cler Site or Obrite, they will not fog. Lenses bonded with epoxy to face plates with tempered glass can be removed by heating to 550°F and then can be rebonded to another face plate.

Contact Lenses.—Individuals wearing corneal or scleral contact lenses for the correction of their ametropia may simply place an air space in front of their eyes using either hard hat, goggles or mask. Individuals wearing corneal contact lenses must be careful when the air space is unseated, however, since the lenses tend to wash away. This will not occur with the use of scleral contact lenses.

Skin Diver Contact Air Lenses (SCAL).—The patient's prescription may be ground onto the scleral contact lens before the air space is attached to its anterior surface.

Refractive Keratoplasty.—Both in keratophakia (introduction of homoplastic corneal parenchyma into a host cornea) and in keratomileusis (the autoplastic remolding of the host cornea) the dioptric power of the cornea can be modified, thus correcting an existing ametropia.[10,11] The diver then can use any one of the four air spaces that he desires just as can an emmetrope.

Intraocular Acrylic Implants (Phacoprosthesis).—Recent experience with postcataract intraocular acrylic implants utilizing an iris supported lens seemingly has eliminated former complications.[12] Correction for the refractive error can be ground into the lens before insertion into the eye and the diver then can use any one of the four air spaces that he desires as in the case of an emmetrope.

Central visual acuity underwater was measured by a Snellen visual acuity chart especially designed for me by the American Optical Company. Encased in 8 mm. plexiglass, the letters were microphotographically reduced in size to offset the one-fourth displacement of objects that takes place when an air space is placed in front of a diver's eyes. The edges of the letters on the 20/20 line when the diver is 20 feet from the chart subtend a visual angle of one minute when the chart is in clear water and adequate illumination is present. A horizontal visual range greater than 50 feet as measured with a Safeline reel (using the 20/400 letter of the American Optical underwater visual acuity chart) was maintained. Natural illumination greater than 200 foot-candles as measured with a General Electric light meter type 213 encased in plexiglass 9 mm. thick was maintained. The plexiglass housing of the meter is wrapped in black waterproof plastic tape except for the windows over the cell and scale, thus eliminating internal reflections. Visual fields underwater were measured on a 17-inch radius perimeter. A Jenkel Davidson 3 mm. target Lumiwand encased in 5 mm. plexiglass was used as the test object. The fields were measured at night in a darkened fresh water pool. The central visual acuity and visual fields of divers whose ametropia ranged up to five diopters (plus and minus) were found to be unaffected underwater by correcting their ametropia with the first eight methods previously described. I have not investigated divers whose ametropia has been corrected by the last two methods—theoretically, their visual acuity and peripheral fields likewise should be unaffected.

In my opinion to date, the best, most practical method for correcting ametropia for skin and scuba divers is by bonding their corrective lenses with optically clear epoxy to a standard oval face mask made of tempered glass. Efforts should be continued to develop a wrap-around mask that would give a normal visual field without an image jump. In the future, when hydronauts colonize the continental shelf and from there explore the abysmal depths, probably the best method for correcting their ametropia and correcting the "loss" of their corneas would be to extract their lenses, replace them with prosthetics of correct power (equivalent to the power of a fish lens) and chemically protect their corneas from exposure to the sea such as is done by the secretions from the Harderian gland found in Sirenians.

Summary

Three types of diving are discussed and the necessity of placing an air space in front of a diver's eyes underwater in order to obtain clear vision is explained. The three most pronounced optical effects of placing a plano air space in front of a diver's eyes are discussed. The current ten methods of correcting a diver's ametropia are discussed and the conclusion is that the best and most practical method to date is to bond the lenses with optically clear epoxy to a standard oval face mask made of tempered glass.

References

1. Williamson, D. E.: Medical Standards for Sport Scuba Diving, J. Florida M. A. 52:712-713 (Oct.) 1965.
2. Duane, T. D.; Emrich, R. J., and Shepler, H. G.: Lens System Designed for Water to Air Vision in the Submerged Human Eye, Arch. Ophthal. 61:561-564 (Apr.) 1959.
3. Bedrossian, H. E.: "Optics" The Eye, Springfield, Ill. Charles C. Thomas, Publisher, 1958, pp. 127-128.
4. Bates, Denny: Sight Underwater, Underwater News, pp. 3-4 (Apr.) 1967.
5. Harrington, David O.: Normal Visual Field, The Visual Fields, St. Louis, The C. V. Mosby Co., 1964, p. 114.
6. Surface-Supplied Diving. U.S. Navy Diving Manual, Washington, D. C., U.S. Government Printing Office (July) 1963, sec. 2.1 p. 1.
7. Dugan, James: Naked in the Sea, Man Under The Sea, New York City, Harper and Row, 1966, pp. 21-22.
8. Faust, K. J. and Beckman, E. L.: Evaluation of a Swimmer's Contact Air-Water Lens System, Military Medicine 131:779-788, 1966.
9. Hamblin, Theodore, Ltd., Personal Communication, 15 Wigmore Street, London SWI, England (Aug.) 1966.
10. Barraquer, Jose I.: Modification of Refraction by Means of Intra Corneal Inclusions: International Ophthalmology Clinics, Boston, Little Brown and Company 6:75 (Nov.) 1966.
11. Barraquer, J. I.: Keratomileusis, International Surgery 48:103-117 (Aug.) 1967.
12. Jaffe, Norman S.: Personal Communication, 1680 Meridian Avenue, Miami Beach, Florida, (Aug.) 1968.

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Acquired Cytomegalovirus Infection and Retardation of Somatic Growth

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Most cases of overt infection with cytomegalovirus acquired beyond the neonatal period have been observed in patients with neoplastic disease or in patients receiving immunosuppressive therapy for organ transplants.[1-5] In the absence of an underlying disease process, acquired infection with cytomegalovirus usually is subclinical in character and associated with a paucity of clinical findings other than hepatomegaly and occasionally associated with deranged liver function tests.[6-10] It is the purpose of this paper to report the clinical histories of two cases of cytomegalovirus infection whose bizarre clinical manifestations and chronicity defied an etiological diagnosis.

Report of Cases

Case 1.—A 10-month-old white girl was referred to the Shands Teaching Hospital for evaluation of her failure to thrive.

The infant was a 920 Gm. product of an uneventful delivery. She was described as fully formed, having hair, finger nails, toe nails and a well-developed foot print. The infant was taken home from the hospital at one month of age, at which time she weighed 2,200 Gm. She slowly gained weight and ate poorly. Her subsequent development is described as good. She learned to walk with support and pick up small objects. At the time of admission, the patient had a five to six word vocabulary.

Physical examination revealed a thin, miniatured child with the physical development of a normal 3-month-old infant. The infant weighed 4.0 kg. and measured 58 centimeters in length. The head had a circumference of 35 cm. Pertinent physical findings were limited to the abdomen, where examination revealed the liver to be down 3 cm. and the spleen down 4 cm. from their respective costal margins in the midclavicular line.

The remainder of the physical examination was noncontributive. Pertinent laboratory findings included a serum glutamic oxaloacetic transaminase of 45, a serum glutamic pyruvic transaminase of 29, a bromsulphalein of 1.5%, total proteins of 5.5 and a serum albumen of 3.6. Quantitative immunoglobulin levels were IgG 300 mg./100 cc., IgA 24 mg. 100 cc., and IgM 48 mg./100 cc. Her total fasting lipids were 860; cholesterol was 121; T-4 was 13.4. Results of the latex fixation test were negative. Examination of the stool revealed 4 + Giardia lamblia infestation. The bone age was approximately three months. Peripheral smear revealed erythrocytic morphology compatible with iron deficiency anemia or chronic inflammation. A bone marrow aspiration was interpreted as normal. The child's total iron binding capacity was 460 mcg. 100 ml.; serum iron was 73 mcg. 100 ml.; iron saturation was 16% and hepatoglobins were 106. Liver biopsy revealed an acute nonspecific inflammation of the liver parenchyma and portal spaces. A urine culture for cytomegalovirus was positive.

The child had an asymptomatic hospital course. The patient was discharged only to be readmitted at 16 months of age because of a pneumoccocal pneumonia following a viral exanthema of undetermined etiology. At the time of this admission she weighed 5.3 kg. and had a body length of 63.5 cm. Hepatomegaly again was noted. Repeat quantitative immunoglobulin determinations revealed IgG 620 mg./100 cc., IgM 78 mg./100 cc., and IgA 26 mg./100 cc. Cytomegalovirus complement fixing antibodies were present in her serum at a titer of 1:128.

Case 2.—A 29-month-old white boy was referred to the Shands Teaching Hospital for evaluation of fever of undetermined etiology and hepatosplenomegaly of five months' duration.

The patient was a full term 6 pound, 11 ounce product of an uncomplicated pregnancy, labor and forceps delivery. Despite frequent upper respiratory infections, bouts of otitis media and two severe episodes of diarrhea (the latter requiring hospitalization), the patient did relatively well and exhibited a normal growth pattern until 21 months of age. His birth weight which had started out between the 25th to 50th percentile had remained within this range until 8 months prior to admission, at which time the infant developed chickenpox. Though the cutaneous lesions resolved, spiking fevers with temperatures ranging from 102 to 104F persisted. Because of this febrile pattern the patient was admitted to another institution where hepatosplenomegaly first was noted. A complete blood count and urinalysis were within normal limits except for anemia with a hematocrit of 24%. The serum sedimentation rate was 22 mm. hr.; a serum glutamic oxaloacetic transaminase was 97 units. Blood cultures x 2, urine cultures x 3, stool culture, skin tests for atypical mycobacteria, mycobacterium tuberculosis and histoplasma, cold agglutinins, febrile agglutinins, heterophile test and examination of the stool for ova and parasites were negative. The patient was transfused with 250 cc. of whole blood. He was discharged after two weeks when later he again exhibited a high spiking fever and was admitted to the previous institution with evidence of pneumonia involving the right upper lobe. Hepatosplenomegaly again was noted. Despite supportive measures and antibiotic therapy with erthromycin the patient continued to deteriorate. He was discharged 20 days prior to admission unimproved and referred to the Shands Teaching Hospital as a diagnostic problem. At the onset of his disease eight months prior to admission, the patient weighed 27 pounds. At the time of his admission to the Shands Teaching Hospital he weighed 27.5 pounds.

Physical examination revealed a thin, pale, irritable male infant in no acute distress. Vital signs included a temperature of 101.3F, a pulse rate of 150 and respirations of 26. Pertinent physical findings included encrusted ulcers over the lower extremities and feet associated with 1+ edema. The nail beds were pale. The abdomen was protuberant with the liver down 9 to 10 cm. below the right costal margin in the midclavicular line, the spleen down 7 to 8 cm. on the left costal margin in the midclavicular line. The liver and spleen were very firm with sharp edges. The remainder of the physical examination was noncontributory.

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Laboratory evaluation revealed a hemoglobin of 7.6 Gm., a hematocrit of 25, white blood count of 10,200 with 23 neutrophils, 11 bands, 63 lymphocytes and 3 monocytes. Platelet counts were in the range of 25,000 to 76,000. The reticulocyte count ranged from 3.7 to 15.9%. The patient's blood type was Rh-negative; the direct and indirect Coombs' were negative. No atypical antibodies were demonstrated. The alkaline phosphatase was 151 units, serum glutamic oxaloacetic transaminase serum glutamic pyruvic transaminase 284/63 units and the total bilirubin 0.3. Serum electrophoresis revealed a total protein of 5.6 with 2.7 albumin, 2.8 globulins and an A/G ratio of 1. The alpha 1 was 0.2, the alpha 2 was 9.7, the beta globulins 0.7 and the gamma globulins 1.2. Quantitative immunoglobulin levels revealed IgM to be 265 mg./100 cc. (normal range for age one to three years is 28 to 130 mg./100 cc.), IgG 505 mg./100 cc. and IgA 71 mg./100 cc. Total lipids range from 806 mg./100 cc. to 1427 mg./100 ml. with a total iron binding capacity of 650 mcg./100 ml. and an iron saturation of 45%. Chest x-ray revealed a questionable right lower lobe bronchopneumonia. Upper GI roentgenograms, long bone series and ECG were within normal limits.

Liver biopsy revealed a marked distortion in normal architecture owing to excessive periportal fibrosis and triaditis. The latter component was composed of a mixed chronic inflammatory cell infiltrate. The hepatocytes exhibited a marked, fine fatty change. Extensive focal predominantly midzoned necrosis and fibrosis were present. Bone marrow biopsy revealed a hypercellular marrow. No granuloma were identified. Numerous cultures for bacteria, systemic fungi and mycobacteria and results of skin tests for typical and atypical mycobacteria, blastomycosis, histoplasmosis, coccidiomycosis and monilia, and Sabin-Feldman dye tests were negative.

While in the hospital, the patient spiked temperatures each night from 101.3 to 103.1F for a period of seven days. Thereafter the temperature spikes remitted spontaneously without any sort of treatment and remained below 100.4F for the remaining 12 days of his hospitalization. Cytomegalovirus was recovered from the urine of this patient shortly after his discharge. Complement-fixing antibodies were present in the patient's serum at a titer of 1:256.

Virus Isolation and Serological Studies

The urine of each of the patients previously mentioned were inoculated directly into WI-38, a diploid fibroblastic tissue culture line derived from human embryonic lung. Characteristic cytopathic effect was observed at four and 13 days, respectively. This cytopathic effect was demonstrable on repeated passages. Infected tissue cultures stained with May-Grünwald-Giemsa stain revealed characteristic intranuclear inclusion bodies. Specific neutralization was performed utilizing a modification of the plaque neutralization technique described by Plummer and Benyesh-Melnick.[11]

The complement-fixation tests were performed with the micro method.[12] The antigen was obtained from Microbiological Associates, Inc.

Discussion

Both patients exhibited marked retardation of somatic growth. Although it must be considered to be a case of acquired cytomegalovirus infection, the disease described in case 1 may have originated before birth since the retardation of somatic growth was evident in the immediate neonatal period. Case 2 pursued a normal growth and development curve through the 21st month of life. The abrupt onset of somatic developmental arrest coincided with an episode of varicella infection. The presence of marked hepatosplenomegaly early in the course of this illness due to varicella virus suggested that the cytomegalovirus infection antedated the development of varicella. Unfortunately, virus isolation studies on the liver biopsy and longitudinal cultures are lacking since the diagnosis of cytomegalovirus disease was not entertained at the time.

Hepatosplenomegaly was present in both patients. The severity of pathological process involving the liver had a crude correlation with the severity of the clinical manifestations. The patient in case 1 had minimal isolated hepatic cell necrosis whereas the biopsy of the patient in case 2 revealed widespread disruption of the lobular architecture, severe focal hepatocytic necrosis and periportal fibrosis.

The illness of the patient in case 2 was complicated by manifestations of hypersplenism, anemia, thrombocytopenia and, eventually, neutropenia as well as by fever and hyperlipidemia. The latter two were presumed secondary to parenchymal hepatic disease. It can be contended in both cases that the role of cytomegalovirus infection was secondary to an as yet undefined disease process and only through the widespread application of virus isolation techniques to problems of this type will this question be answered.

References

1. Hanshaw, J. B. and Weller, T. H.: Urinary Excretion of Cytomegalovirus by Children With Generalized Neoplastic Disease, J. Pediat. 58:305, 1961.
2. Benyesh-Melnick, M.; Dessey, S. I., and Fernback, D. J.: Cytomegalovirus in Children With Acute Leukemia and in Other Children, Proc. Soc. Exp. Biol. Med. 117:624, 1964.
3. Hill, R. B. Jr.; Rowlands, D. T. Jr., and Rifkind, D.: Infectious Pulmonary Disease in Patients Receiving Immunosuppressive Therapy for Organ Transplantation, New England J. Med. 271:1021, 1964.
4. Hedley-Whyte, E. T. and Craighead, J. E.: Generalized Cytomegalic Inclusion Disease After Renal Homotransplantation, New England J. Med. 272:473, 1965.
5. Duvall, C. P. et al: Recovery of Cytomegalovirus from Adults With Neoplastic Disease, Ann. Int. Med. 64:531, 1966.
6. Medearis, D. N. Jr.: Observations Concerning Human Cytomegalovirus Infection and Disease, Bull. Johns Hopkins Hosp. 114:181, 1964.
7. Hanshaw, J. B. et al: Acquired Cytomegalovirus Infection: Association With Hepatomegaly and Abnormal Liver Function Tests, New England J. Med. 272:602, 1965.
8. Nelson, J. A. and Wyatt, J. P.: Salivary Gland Virus Disease, Medicine 38:223, 1959.
9. Wyatt, J. P. et al: Generalized Cytomegalic Inclusion Disease, J. Pediat. 36:271, 1950.
10. Stern, H. and Tucker, S. M.: Cytomegalovirus Infection in the Newborn and in Early Childhood, Lancet 2:1268, 1965.
11. Plummer, G. and Benyesh-Melnick, M.: A Plaque Reduction Neutralization Test for Human Cytomegalovirus, Proc. Soc. Exp. Biol. Med. 117:145, 1964.
12. Sever, J. L.: Application of a Microtechnique to Viral Serological Investigations J. Immun. 88:320, 1962.

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Wringer Injuries in Children
An Analysis of 300 Cases

Robert E. Duncan, M.D. and Thad Moseley, M.D.

A study was made of 300 consecutive patients with wringer injuries of an extremity treated as inpatients at Duval Medical Center between September 1960 and January 1968. The cause of the injury was a commercial washing machine with an exposed wringer-type drying mechanism. One hundred of these patients were included in a 1965 report by Moseley and Hardman.[1]

Wringer injuries most frequently occur in children. The ratio of children to adults in this series was 99:1. The age range was 11 months to 34 years and the average age was 4.5 years. The male was injured approximately twice as often as the female; the race distribution was approximately that of the hospital census population. Surprisingly, there was only slight dominance of injury of the right arm and in three patients the injuries were bilateral.

The average time from injury to admission was 4.4 hours. The average hospital stay was 3.8 days.

The injury produced was a crushing friction-burn. A shearing component was added as the victim attempted to free himself from the machine. The nature of the injury explains the complications seen. Edema almost always was present and abrasion was seen in 240 patients. Other injuries in this series of patients seemed related to the strength of the roller spring, the age of the patient and the duration of time between injury and treatment.

Overall, 99 of the 300 patients (33%) either presented with a complication or a complication other than edema, abrasion or contusion developed. The complications included ulceration, laceration, fluid accumulation, infection, fracture, dislocation and nerve compression. Severe changes developed in only 10% of the patients seen before three hours post injury, while in the patients seen later than three hours, complications occurred in 23%. Of the 300 patients seen, it was in the 99 in which complications developed that treatment was a problem.

Treatment

After the injured extremity was examined for arterial, nerve and soft tissue damage, an x-ray of the involved area was made and tetanus protection was administered as indicated. Following washing of all abrasions with pHisoHex, a gauze pad impregnated with nitrofurazone (Furacin, Eaton Laboratories) or petroleum jelly was applied over the area of injury. Several layers of occlusive wrappings then were placed upon the injured part extending from the metacarpophalangeal joint to the upper extent of the injury. The entire dressing then was wrapped with an elastic bandage, leaving an opening over the radial artery for palpation of the pulse. The part was then suspended from an intravenous stand by an elastic strap giving the patient some mobility but always maintaining the involved part in an elevated position.

The radial pulse, nail bed capillary pulse and sensation were recorded hourly for the first eight hours and then as necessary depending on the severity of the injury. The dressing was removed at 12, 24 and 48 hours and the injured area was carefully examined for complications. If no complications were observed, the dressing was reapplied. Suspension usually was not necessary after 48 hours, although the compression dressing was usually left in place for an additional 24 hours.

Fractures and dislocations were treated immediately by necessary manipulation and fixation. Lacerations were sutured at once and fluid accumulation, when detected, was aspirated. Debridement was done when necrotic tissue was evident; following the development of healthy granulation tissue, skin grafting was used as the wound dictated. For evidence of embarrassment of distal nerve function, fasciotomy was performed.

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At the time this paper was presented, Dr. Duncan was senior resident in surgery and Dr. Moseley was chief of surgery, Duval Medical Center, Jacksonville.

Discussion

During the first 24 hours following injury, the injured extremities usually appeared normal, yet without careful treatment and observation complications might have developed which could have produced disability of the part.

Subcutaneous accumulation of fluid frequently was observed at the time of the 24 hour dressing. Although some authors have advocated incision and draining under general anesthesia, we have obtained satisfactory end results by aspiration with a large caliber needle. In only one of the eight patients requiring aspiration was skin grafting necessary.

Immediate fasciotomy in the one adult patient presenting evidence of early nerve compression resulted in complete functional recovery of the part. A four-year-old child received a fasciotomy at a later than optimum time because of difficulty in eliciting signs of early nerve compression. The end result was a poorly functioning hand which required multiple reconstructive procedures. We are convinced that any patient presenting evidence of distal nerve dysfunction ideally should have an early and complete fasciotomy performed under general anesthesia.

This study revealed that 285 of the 300 patients (95%) were free of all evidence of injury at their last follow-up visit. Healed lacerations, skin grafts or healed fasciotomy incisions were evident in 14 of the 300 patients (4.7%) and one patient has residual nerve damage. Function and appearance is excellent in all but one (99.7%) of the patients reported upon.

Summary

An analysis of 300 wringer injuries indicates that early treatment with compression and elevation is advisable. Frequent follow-up examinations, with aspiration or fasciotomy when indicated, will decrease the severe and long-term complications of wringer injuries.

References

1. Moseley, T. and Hardman, W. W. Jr.: Treatment of Wringer Injuries in Children, South. M. J. 58:1372-1374 (Nov.) 1965.
2. MacCallum, D. W.; Bernhard, W. R., and Bauner, R. L.: The Treatment of Wringer Arm Injuries, New England J. Med. 247:750, 1952.
3. Archer, R. R. and Sawyers, J. L.: Surgical Management of Wringer Arm Injuries, personal communication.

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Multilocular Cystadenoma of the Liver

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A well-tailored, physically-trim master of ceremonies at a luxury hotel noted a bloating sensation when he drank carbonated beverages. Within two to three days he experienced severe pain and 24 hours later was admitted to the hospital. An exploratory procedure revealed cystadenoma of the liver. The excised cyst was probably the largest one which has been reported, and due to its size, lack of symptoms, and dearth of literature on the subject, this case report is presented.

Review of Literature

Cystadenoma in intrahepatic bile ducts was described by Siegmund in 1889 and by Dmochowski and Janowski in 1894. Keen in 1892, reported the first successful excision of a true multilocular cystadenoma of the liver with the patient being alive and well seven years after the operation.

Morphologically-similar tumors were recorded in the extrahepatic biliary tract by Hall and Brazil (1903-1904), Evans (1921-1922), and Shambaugh (1933). Edmundson (1958) and Williams (1961)[6] reported in detail on intrahepatic bile duct tumors. A case report of intrahepatic cystadenoma of bile duct origin with malignant alteration was reported by Thompson and Wolff (1965).

Ewing (1941) stated, as do most of the textbooks of pathology, that cystic adenoma of the bile ducts is rare, and most of the cases are reported as "golf ball" sized lesions. Warvi (1944) recorded a single case of bile cystadenoma.

Itcuson, et al., (1957) reported five cases of true, benign cystadenomas of the liver encountered at the Mayo Clinic between 1907 and 1954.

Edmundson (1958) suggested that the term cystadenoma should be confined to the true multilocular cystic tumors lined with columnar epithelium and having a dense cellular stroma. Keech (1951) stated that these tumors are reminiscent of cystadenomas of the pancreas in that the gross and microscopic structures are similar.

Davis (1936) reported 499 patients with nonparasitic cysts of the liver, with 20 having solitary multilocular cysts.

Multiloculated hepatic cystadenomas are not common; only individual cases have been reported. Some may be retraction cysts. True neoplastic cysts of the liver are rare. This is a report of a large multilocular cystadenoma of the liver of predominantly parenchymal cells.

Report of Case

Approximately 24 hours prior to admission to the hospital, the patient had severe, colicky, crampy epigastric type pain in the right upper quadrant. Three to four days previously, he noticed a bloating sensation in the epigastrium when he drank carbonated beverages. Bowel habits had not changed. There was no history of jaundice or food intolerances.

The past history was noncontributory to the subject illness. He had the usual childhood diseases, no previous operations except the removal of a small gland from the left side of his neck and a tonsillectomy when a child. He had no known allergies, was not on any medication and had had no blood transfusions. His mother was a known diabetic, and his father died of a coronary heart disease.

Physical examination.—The blood pressure was 112/90, pulse rate 100, respirations 20, temperature 98 F, weight 175 pounds and height 5′11″. His stated age was 36 years. He was resting quietly in bed and appeared in no distress. Examination of the head and neck showed no unusual finding. The heart appeared normal and the lungs were clear and resonant. Palpation of the abdomen revealed no abnormalities except in the right upper quadrant where a mass occupied most of the area. It was impossible to evaluate. Results of rectal examination were normal as well as the remaining physical examination.

Laboratory findings.—Hemogram on admission showed the hemoglobin level to be 13.9 Gm., hematocrit reading 39%, white blood cell count 6,170. The differential cell count was normal. Urinalysis was normal. Repeat hemogram postoperatively revealed a hemoglobin level of 14.4 Gm. and hematocrit reading of 41% after two transfusions. Biochemical procedures were normal. Total proteins were only slightly decreased. The SGOT was elevated to approximately 78.

X-ray reports.—Nephrograms revealed no significant abnormalities of either kidney. A large soft tissue mass was visualized in the right upper quadrant. X-ray of the chest, posteroanterior and lateral, revealed focal areas of atelectasis at both lung bases with slight elevation of the right hemidiaphragm and no evidence of pneumothorax or pleural effusion.

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Operation.—After the area was completely explored in a retroperitoneal manner, the incision was extended across the subcostal region to the midline, opening the abdomen and exposing its contents. Upon incision of the peritoneum, a large cystic mass was identified which arose from the entire undersurface of the right lobe of the liver. There was no involvement of the gallbladder or hepatoduodenal ligament. Following identification of the mass, a complete abdominal exploration was conducted. No unusual finding was noted in the colon, small bowel, pelvis, stomach, spleen or kidney areas. The intestines were then packed off. As well as possible, the liver was delivered into the wound with the 1,770 Gm. cystic mass, and after several attempts with a dissecting scissors, a plane of cleavage was found. It was then possible to separate completely the liver and the cystic mass, with delivery of the cystic mass in toto. Bleeding and oozing occurred, but were controlled by packs for several minutes; then the edges of the liver were sewn with 00 chromic catgut in a figure-eight type suture. At the end of the procedure, bleeding was very well controlled; there was no need of any substance such as surgical gel. Several large Penrose drains were left in the fossa ovalis and drained through the mid-portion of the wound. The wound was closed in its normal anatomical layers and a dry sterile dressing applied. Blood loss did not exceed 500 cc.

Pathology.—The specimen consisted of an unopened, multiloculated cystic structure with a congested, fibrous, smooth surface. It measured 22.0 x 18.0 x 18.0 cm. and weighed 1,770 Gm. The cyst contents were brown to light gray and mucinous. The wall of the cyst measured 3 to 4 mm. in thickness with the lining being smooth and light gray. Focal areas of hemorrhage were noted.

Impression (microscopic).—Cystadenoma of the liver.

Course in hospital.—The patient was admitted to the hospital and prepared for surgery. He was known to smoke two to three packs of cigarettes a day and the necessary precautions with IPPB treatment were taken into account. Following work up and preparation, he was taken to surgery where the 1,770 Gm. cystadenoma was exised in toto. The postoperative course was entirely uneventful, and he was discharged with an analgesic, mild narcotic, and was followed on an outpatient basis. He received no other medication, and the outpatient course was uneventful. He is now completely recovered.

Summary

Reports of eight patients with benign multilocular cystadenomas of the liver have been reviewed from the literature, with five patients en-

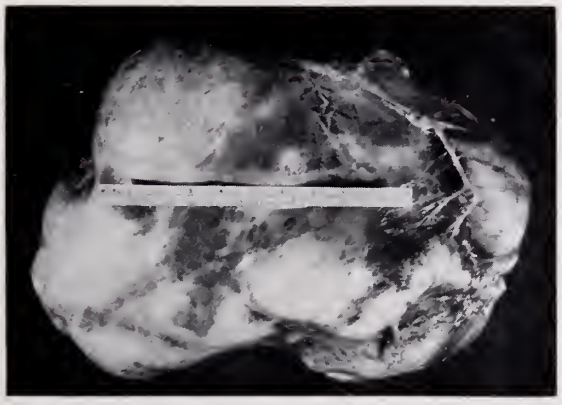


Fig. 1. — Gross photograph of the unopened cyst.



Fig. 2. — Gross photograph of the opened cyst.

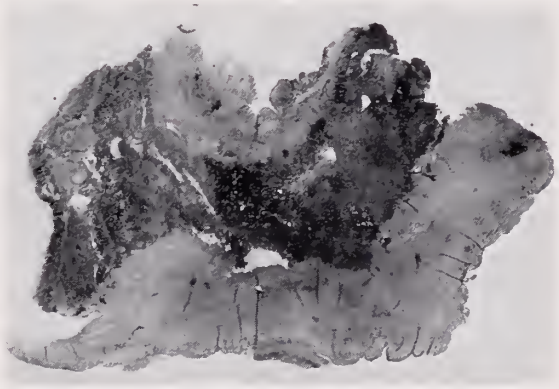


Fig. 3. — Low-power photomicrograph of opened cyst in which the adenomatous areas are thrown into complex folds supported by a scanty vascular stroma.

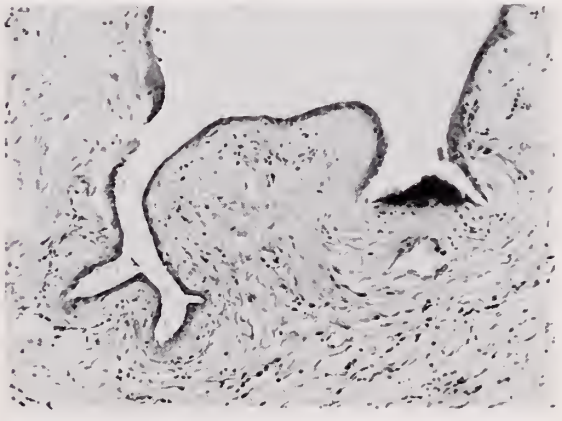


Fig. 4. — Photomicrograph of a loculi lined by columnar, mucous-secreting epithelium.

countered at the Mayo Clinic from 1907 to 1954. A single case with a very large cyst has been added.

A 36-year-old man complained of severe pain in the upper abdomen; at operation a multilocular cystadenoma measuring 22.0 x 18.0 cm. and weighing 1,770 Gm. was removed from the right lobe of the liver. The cyst contained a brown to light gray mucous and had a fibrous, smooth surface measuring 0.3 to 0.4 cm. in thickness.

Multiloculated cysts of the liver are rare and thought to be truly neoplastic, having their origin in the bile ducts and showing a tendency to recur.

Bibliography

1. Corrin, B.: Cystadenoma of the Liver, J. Path. Baly. 84:441, 1962.
2. Edmondson, H. A.: Correspondence to Author, March 25. 1968.
3. Edmundson, H. A.: Tumors of the Liver and Intrahepatic Bile Ducts, Atlas Tumor Path. Sec. 7, Fascicle 25.
4. Henson, S. W. Jr.; Gray, H. K., and Dockerty, M. B.: Benign Tumors of the Liver, Surg. Gynec. Obst. 104:551-554. 1957.
5. Thompson, J. E., and Wolff, M.: Intrahepatic Cystadenoma of Bile Duct Origin with Malignant Alteration, Military Med. 130:218-224, 1965.
6. Williams, B.: Cystadenoma of the Liver, Royal Soc. Med. 54:2, 1961.

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Broad Thumbs and Great Toes Syndrome

Rubinstein-Taybi Syndrome

Rafael L. Bejar, M.D. and George F. Smith, M.D.

Five years ago Rubinstein and Taybi presented seven children with an unusual constellation of anomalies consisting of characteristic facies, short broad terminal phalanges of the thumbs and great toes and mental retardation. The entity known as the "Broad Thumbs and Great Toes Syndrome" is now well recognized among pediatricians and physicians working in the field of mental retardation; however, a large number of patients have not been reported[2-9] and there is a lack of critical clinical and etiological data. The majority of patients so far reported have been children. The following case involves a young adult female with classical findings of the syndrome. As far as can be determined, this is the first patient reported from Florida.



Fig. 1. — Peculiar facies of the patient with Rubenstein-Taybi syndrome.

From the department of the Child Development Center, University of Miami School of Medicine, Miami.

Case Presentation

The propositus was a 19-year, six-month-old Caucasian female whose past history revealed that she was the product of an eight months gestation and weighed three pounds at birth. An adequate history of infancy was not available but developmental retardation was noticed by the age of eight months.

Physical examination revealed that she was postpubertal, height 155 cm. and weight 44 kg. She was slightly hyperactive, able to understand commands and follow directions. Her speech was explosive in character, frequently accompanied by gestures, and she had a mild articulation defect. Examination of the head revealed flattening of the occiput. The eyes showed small epicanthal folds and bilateral colobomata of medial iris. The nose was markedly beaked (Fig. 1). The palate was highly arched and an upper front tooth was missing. There was marked pectus excavatum and kyphosis and scoliosis of the thoracic spine. The breasts were well formed and moderate in size. No heart murmur was found on auscultation. The abdomen, external genitalia and deep tendon reflexes were normal, and her gait was slightly ataxic. The hands and feet were broad, fingertips somewhat wide and terminal phalanges of the thumbs and great toes very broad (Figs. 2 and 3). There were bilateral flat feet with metatarsus valgus deformity.

Dermatoglyphic studies revealed a total ridge count of 156 (normal 127). The atd angles were 46° on both palms and the thenar and hypothenar areas showed a negative pattern. The soles showed very large patterns on the hallux (Fig. 4).

Roentgenographic examination showed the skull to be microcephalic, foramen magnum normal, no cerebral calcifications and scoliosis of the thoracolumbar segment. The distal phalanges of the thumbs and great toes were very broad and flat (Fig. 5) with a peculiar type of exostosis of the great toes. The distal phalanges of the other fingers were somewhat broad though not to the degree found on the thumbs.

Laboratory investigations revealed normal urinalysis, hemoglobin 13.8 Gm. %, hematocrit 44%, white blood cell count 12,900 with normal differential. Total proteins were 8.3 Gm.% and the A/G ratio 1.5 to 1. Analysis revealed the chromosomes to be normal.

Comment

Information is now available on about 75 patients with the Rubinstein-Taybi syndrome and, while there still is no pathognomonic sign, the



Fig. 2. — Note the enlarged thumbs.



Fig. 3. — Great toes are very broad.

combination of broad terminal phalanges of thumbs and first toes, mental retardation, beaked nose, a reduction in both height and head circumference, appear to be defining a distinct clinical entity. The patient in this report presented with these clinical findings and in addition a high arched palate, marked scoliosis and pectus excavatum which have been reported occasionally.

The significant clinical finding drawing attention to the diagnosis is the broad thumbs and first toes infrequently seen to this degree in the normal population. Definitive diagnosis depends upon presence of additional clinical features. On clinical observation the broad thumbs and first toes fall into two varieties. First, the distal ends of the thumb and first toe are enlarged and, second, the whole thumb and first toe are enlarged and tend to curve towards the radial side of the hand. The patient in this report showed the former type enlargement.

Mental retardation with an intelligence quotient between 40 to 60 has been a consistent finding; however, this observation may not be fully representative of the intelligence range of these patients since nearly all those reported have come from retarded populations.

The roentgen findings assist in diagnosis especially demonstration of the bony broadening of the terminal phalanges and particularly in combination with angulation of the thumbs and first toes. Other roentgen manifestations include retardation of skeletal maturation, microcrania, large foramen magnum, vertebral and sternal anomalies and flared ilia.

The ridge or dermatoglyphic patterns on the hands and feet are another useful aid in diagnosis. This patient showed only the extra triradii on the thumbs and the large pattern on the hallucal areas of the soles, but these minimal changes aided in diagnosis. The major dermatoglyphic findings are an extra triradius on the tip of the thumb, a pattern in the thenar area of the palm, an ulnar loop at the base of the hypothenar area, and a large pattern in the hallucal area of the sole.

The etiology of the syndrome is not known; however, association with a drug, or teratogenic agent, administered during pregnancy is not suspected. It is most likely that the syndrome will be associated with an abnormality of the gene or chromosome. Chromosomal studies on this patient and on all other patients examined have proved normal; however, these findings do not negate the chromosome as a possible causative factor since a very small deletion or insertion may go undetected.

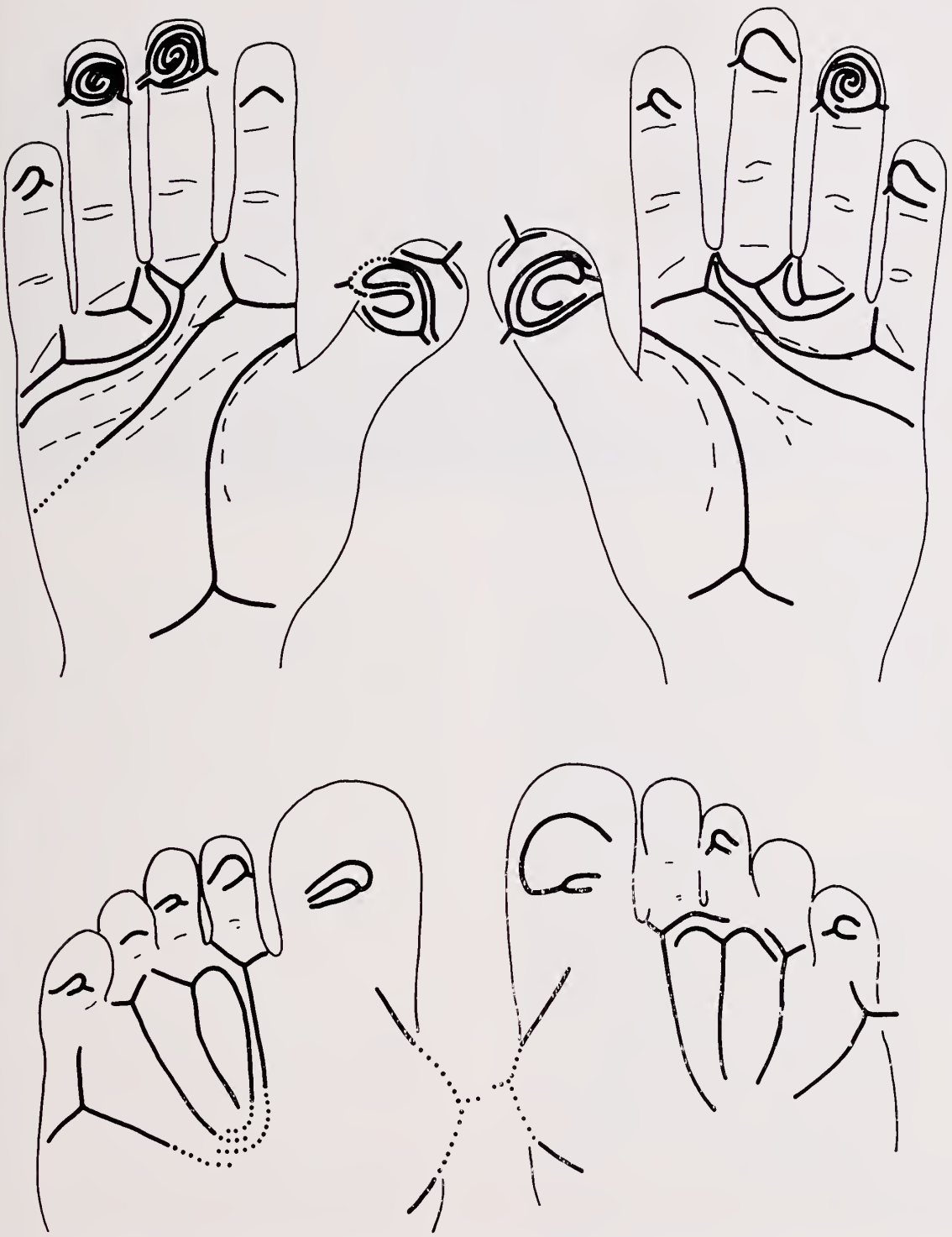


Fig. 4. — Dermatoglyphic patterns of patient. Drawings made from tracings of main lines taken from prints of palms and soles. Patterns are indicated by continuous lines and where the lines could not be identified a dotted line is used.



Fig. 5. — X-rays of great toes showing the very broad terminal phalanges of the first toe.

Summary

A 19-year, six-month-old retarded female with the syndrome of broad thumbs and great toes is reported together with a brief discussion of the entity. Although the associations of mental retardation, characteristic facies and broad thumbs and great toes are considered to represent a specific syndrome, no specific etiology has been established.

References

1. Rubinstein, J. H., and Taybi, H.: Broad Thumbs and Toes and Facial Abnormalities, Am. J. Dis. Child. 105:588, 1963.
2. Coffin, G. S.: Brachydactyly, Peculiar Facies and Mental Retardation, Am. J. Dis. Child. 108:351, 1964.
3. Latuff, H.; Yamin, G., and Quintero, L. D.: Alteraciones de los dedos de manos y pies, anomalias faciales y retardo mental, Bol. Hosp. Ninos 6:195, 1964.
4. Job, J. C.; Rossier, A., and De Grandprey, J.: Etudes sur les manismes constitutionnels, II Le Syndrome de Rubinstein et Taybi. Ann. Pediat. 11:646, 1964.
5. Jancar, J.: "Rubinstein-Taybi" Syndrome, J. Ment. def. Res. 9:265, 1965.
6. Kushnick, J.: Brachydactyly, Facial Abnormalities and Mental Retardation, Am. J. Dis. Child. 111:96, 1966.
7. Robinson, G. C.; Miller, J. R.; Cook, E. G., and Tischler, B.: Broad Thumbs and Toes and Mental Retardation; Unusual Dermatoglyphic Observations in Two Individuals. Am. J. Dis. Child. 111:287, 1966.
8. Johnson, C. F.: Broad Thumbs and Broad Great Toes With Facial Abnormalities and Mental Retardation, J. Pediat. 68:1942, 1966.
9. Taybi, H., and Rubinstein, J. H.: Broad Thumbs and Toes and Unusual Facial Features; A Probable Mental Retardation Syndrome, Am. J. Roentgenology 93:362, 1965.

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Michener, Brown and Turnbull[4] added evidence supporting the beneficial effects of Lomotil in 80 children, concluding that Lomotil was highly useful in controlling abdominal cramping, diarrhea and hypermotility.

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Adults: . . . . 2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

References:

1. Senra del Valle, A.; Linfante de Rufinelli, E. B.; Brumetti, E., and Rossi, R. H.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *127*:475-484 (Oct. 4) 1965. 2. Grinszpan, I. L.; Goldstein, A., and Divito, J.: El chlorhidrato de difenoxilato en las diarreas infantiles, Sem. Med. (Buenos Aires) *125*:758-763 (Aug. 27) 1964. 3. Harris, M. J., and Beveridge, J.: Diphenoxylate in the Treatment of Acute Gastro-Enteritis in Children, Med. J. Australia *2*:921-922 (Nov. 27) 1965. 4. Michener, W. M.; Brown, C. H., and Turnbull, R. B., Jr.: Ulcerative Colitis in Children. II. Medical and Surgical Therapy, Amer. J. Dis. Child. *108*:236-242 (Sept.) 1964.

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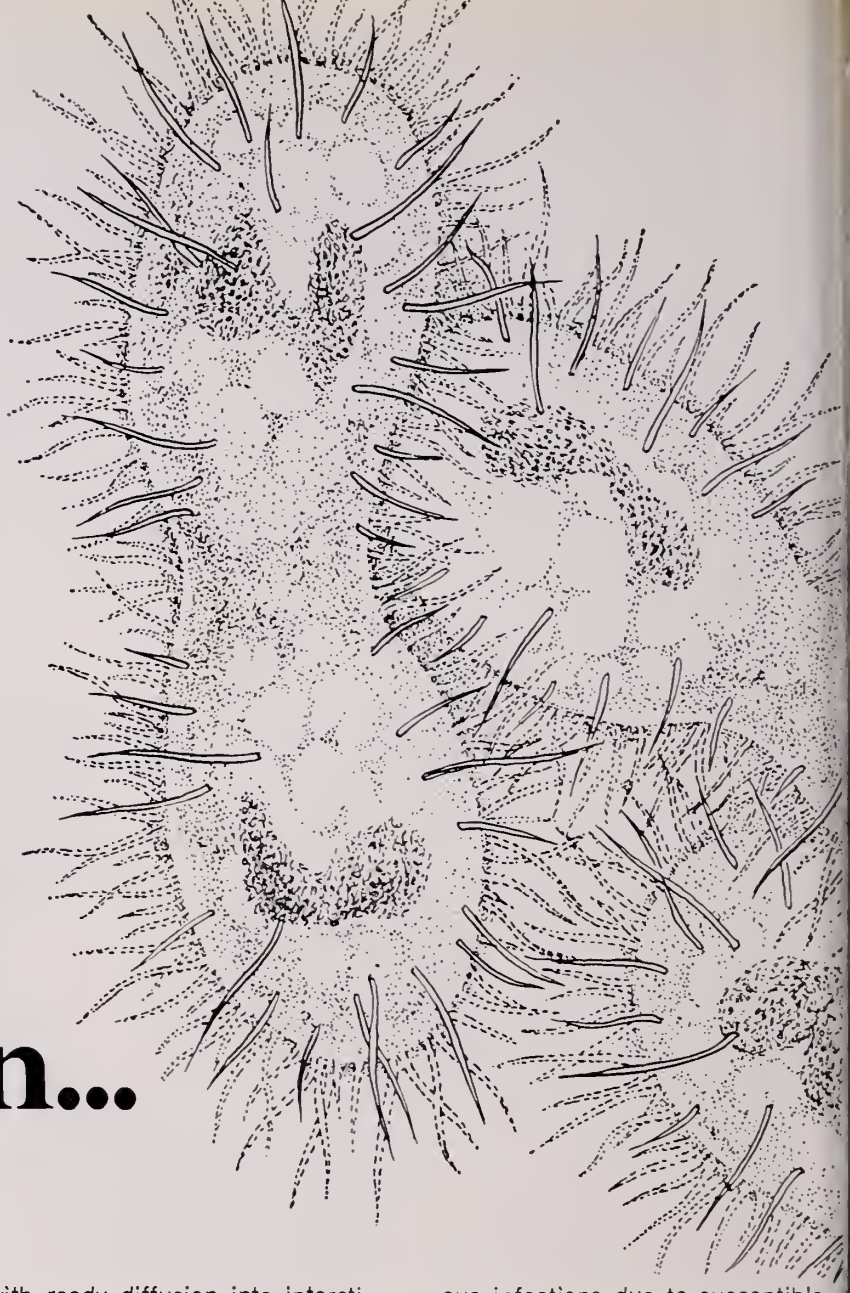
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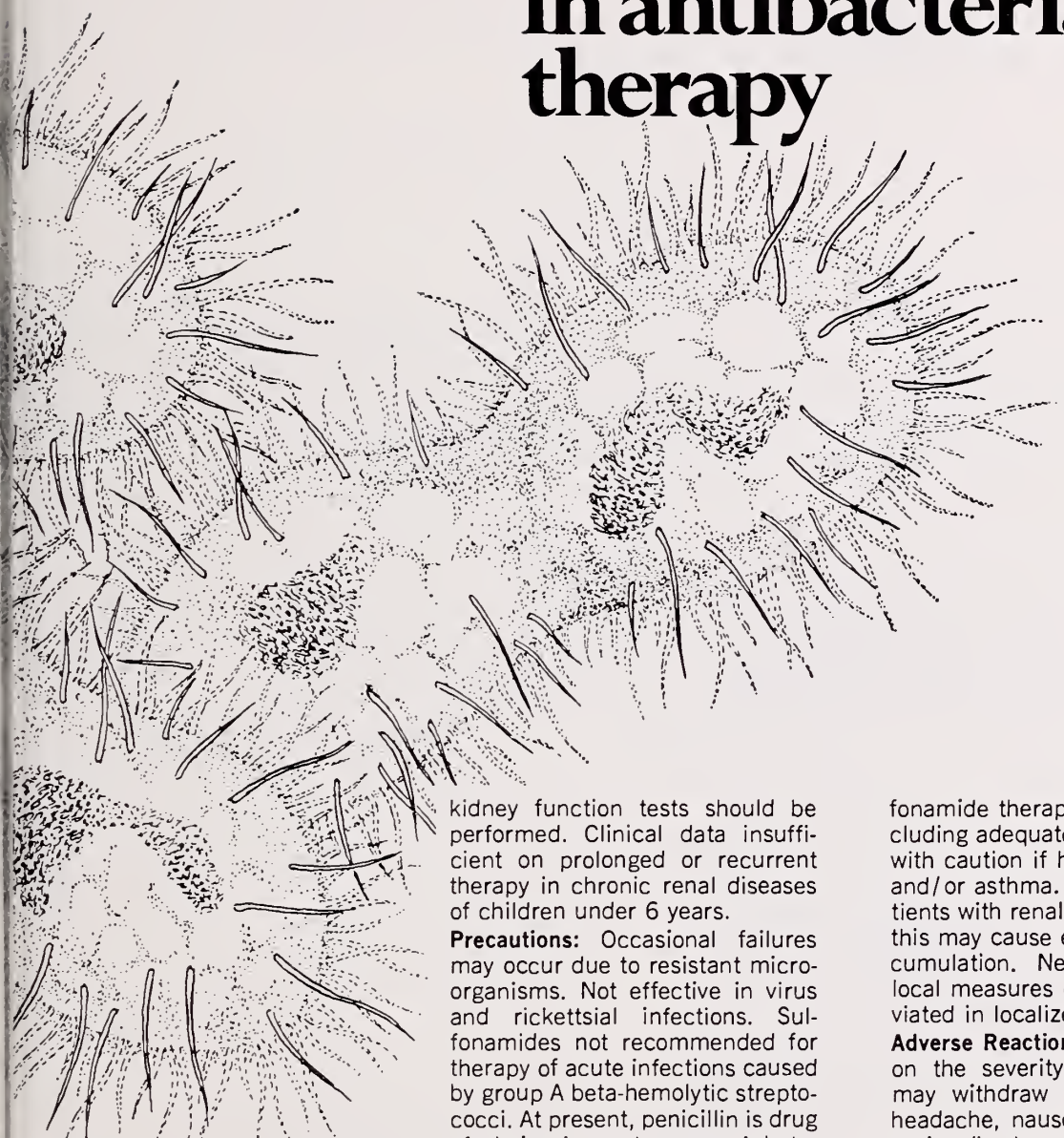
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Artist's rendition of E. coli. As with most strains of E. coli, these have flagella and are motile.

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Precautions: Occasional failures may occur due to resistant microorganisms. Not effective in virus and rickettsial infections. Sulfonamides not recommended for therapy of acute infections caused by group A beta-hemolytic streptococci. At present, penicillin is drug of choice in acute group A beta-hemolytic streptococcal infections; although Gantanol has produced favorable bacteriologic conversion rates in this infection, data insufficient on long-term follow-up studies as to its effect on sequelae of rheumatic fever or acute glomerulonephritis. If other treatment cannot be used and Gantanol is employed in such infections, *important that therapy be continued in usual recommended dosage for at least 10 days*. Observe usual sulfonamide therapy precautions, including adequate fluid intake. Use with caution if history of allergies and/or asthma. Follow closely patients with renal impairment since this may cause excessive drug accumulation. Need for indicated local measures or surgery not obviated in localized infections.

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Florida Medical | editorial

From the Editor

Franz Stewart

Cold Fronts

The University of Miami Institute of Marine Science leads in the search for available and usable Inner Space—the oceans. Dr. Walton Smith, the creator and director of the Institute, has written this description of cold fronts for us. Those who sail, hunt, play golf, or just go outdoors, need to study the movement of cold fronts across Florida.

"The advancing edge of a cold front, as shown on the cover photograph, is often seen during Florida winters, when the weather is frequently dominated by frontal movements. These fronts occur when a mass of cold air moves across the continent in a southern or southeasterly direction, displacing warm air ahead of it. Some hours before the passage of the front the wind increases, shifting to the south. Then high altocumulus clouds appear to the northwest.

"When the front is passing the winds shift to the northwest quadrant with more or less vigorous squalls and low cumulonimbus clouds darken the sky. Sometimes low dark clouds will extend as a long squall line across the sky. Heavy showers and sometimes thunder occur.

"After the front has passed, strong northerly winds may persist for a while, with temporary clearing of the sky followed by cumulonimbus clouds and showers. Cold fronts may at times move at speeds greater than 30 m.p.h. At other times they may remain practically stationary or may be occluded or break up."

F. G. Walton Smith, Ph.D.
Miami

The Rise and Spread of the West

It is a common cliche to remark that sails and guns enabled a small group of Europeans to move about, colonize, subjugate peoples, and spread an influence over the whole world. At the same time, and in spite of the efforts of each other, the descendants from the realms of these most christian majesties continue to survive.

We are proud of our ancestors, and wish we knew even more about them. This doesn't make them less warlike or less determined nor does it diminish the zeal with which we know they revered and feared God and carried on for the right. As a matter of fact, the stories of bravery, the willingness to subjugate to the common good, sacrifice for noble goals—all these are the things that we know carved out a place for us as we are today.

The many characteristics which enabled these people to survive must always have been matched

by the opposite tendencies always present. For good thus was evil, the brave saw the coward, the venturesome matched the complacent. For all in all they were men and women who forever challenged each other, who fought, who blended genetically but also remained fiercely intact.

New goals must now be sought. Colonies do not strengthen a nation. There is no place for the convenient expression, *native,* meaning "to be ruled." *Native* becomes a man who groups himself with a history or a place, a man with whom we must deal.

Guns have now strangely equalized man and again we admire and cherish characteristics of strength, courage, of greatness, of cleverness. Now we must challenge each other in new ways but challenge still.

You admire, not the English, the Spanish, the Dutch, the French, but you see individuals and groups in a common effort somehow coming through the centuries. The very names conjure up courage, venture, hardship, literature, art and music.

Pien Ch'iao and Early Heart Transplant

In *The Yellow Emperor's Classic of Internal Medicine,* Williams & Wilkins Co., 1949, the author, Ilza Veith, explains that "It was not entirely the superiority of Chinese internal medicine that made surgery unnecessary, but the Confucian tenets of the sacredness of the body which counteracted any tendency toward the development of anatomical studies and the practice of surgery." Chinese history records the work of two eminent surgeons, Pien Ch'iao and Hua T'o.

Pien Ch'iao received such acclaim that his "achievements as a surgeon and diagnostician extend from the 5th to the 2nd Century B.C. and over a great variety of places distant from each other." His name had become a part of the language to express great medical praise.

Legend has it that in the 2nd century B.C. Pien Ch'iao was skilled in the use of anesthesia and was able to operate painlessly and he even successfully exchanged the hearts of two patients.

"I'm Glad You Come"

Stewart Roberts was a great physician and leader. Many of us still look to him with affection and are proud he was our preceptor. Once he visited a small house on a by-road not far from Atlanta. Two or three children were playing in the yard. The husband met him at the door and after a conference and a careful examination, plans were made together to care for the medical problem with the best means available.

As the doctor left, the husband took his hand and said, "I'm glad you come."

I understand this better since a loved one was ill last spring. A fine physician, with all paramedical help needed, accepted the problem, sought additional aid and together they made plans to care for the medical problem with the best means available. Even before the favorable results appeared I understood well—"I'm glad you come."

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As a sinusitis deterrent, NTz Nasal Spray can be used to keep the nasal passages open during a cold to help prevent development of acute sinusitis—or to help prevent the acute condition from becoming chronic.

Supplied: NTz Nasal Spray, plastic squeeze bottles of 20 ml.; NTz Nasal Solution, bottles of 30 ml. (1 fl. oz.) with dropper.

NTz is more than a simple vasoconstrictor. It contains

Neo-Synephrine® (brand of phenylephrine) HCl 0.5 per cent, the major component, virtually synonymous with fast, efficient but gentle nasal vasoconstriction.

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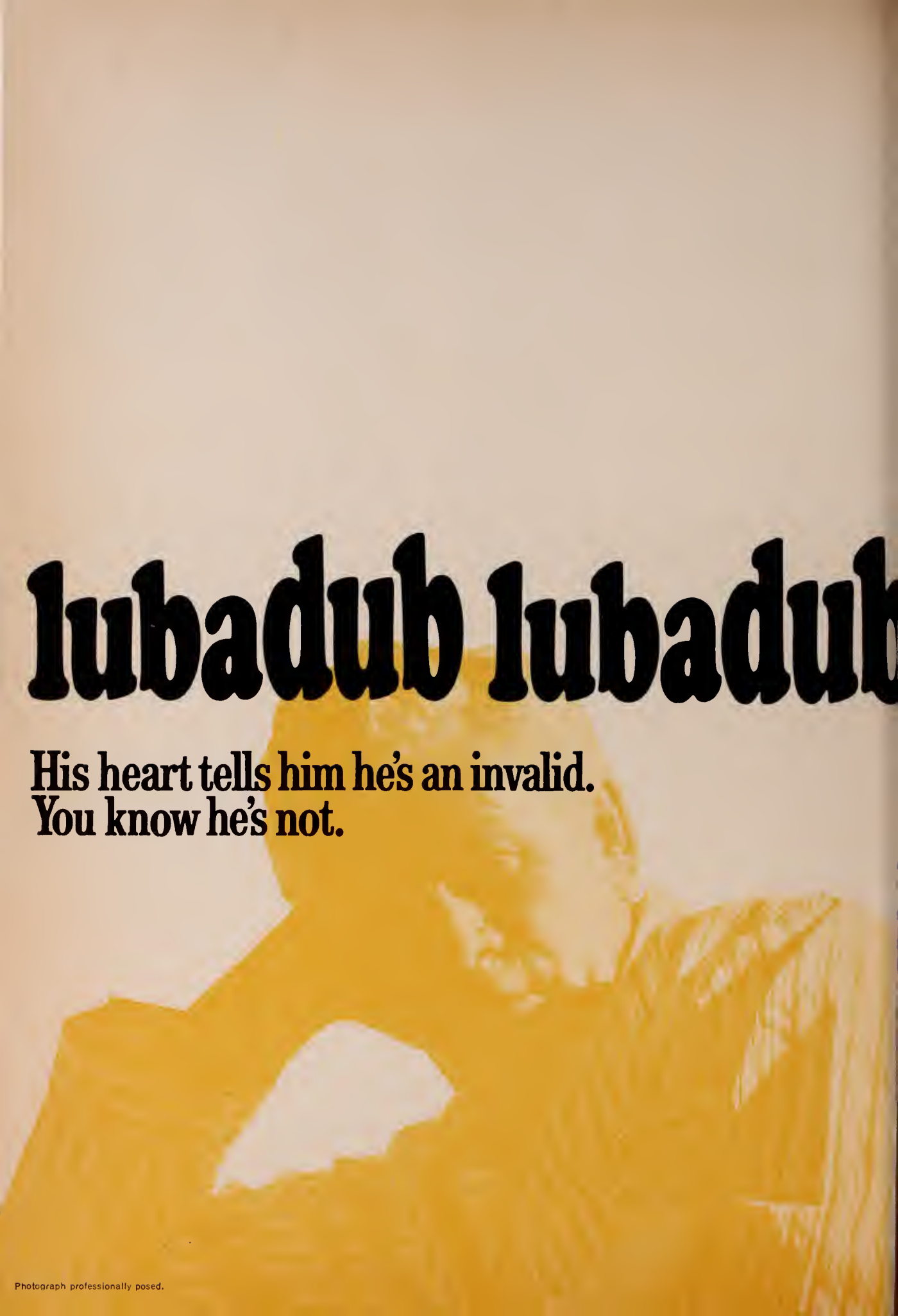
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You know he's not.**



Photograph professionally posed.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

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nxiety is expected in the cardiovascular patient.
little may even be desirable.

ut when anxiety is exaggerated . . . when it
terferes with sleep . . . when it aggravates
ardiovascular symptoms, your help may
e needed.

aturally, you'll want to reassure the patient.

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s adjunctive therapy. It helps relieve anxiety
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mpound to relieve the fever, aches
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A total daily dosage of 3 or 4 tablets will normally provide the continuous relief your patient expects. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

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The action of Trocinate is prompt, making the spacing of dosage easy. Often one or two 400 mg. tablets are sufficient to control diarrhea. The recommended dosage in spasm of the G. I. and G. U. tract is 400 mg. q. 4 h. A prescription of twelve (12) 400 mg. tablets will, in most cases, allow the patient to have a few to keep in reserve.

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Contraindications: Hypersensitivity to tetracycline.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Nonsusceptible organisms may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Side Effects: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity reactions*—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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Vhile waiting for the results of the sensitivity test, tart the therapy likely to succeed...

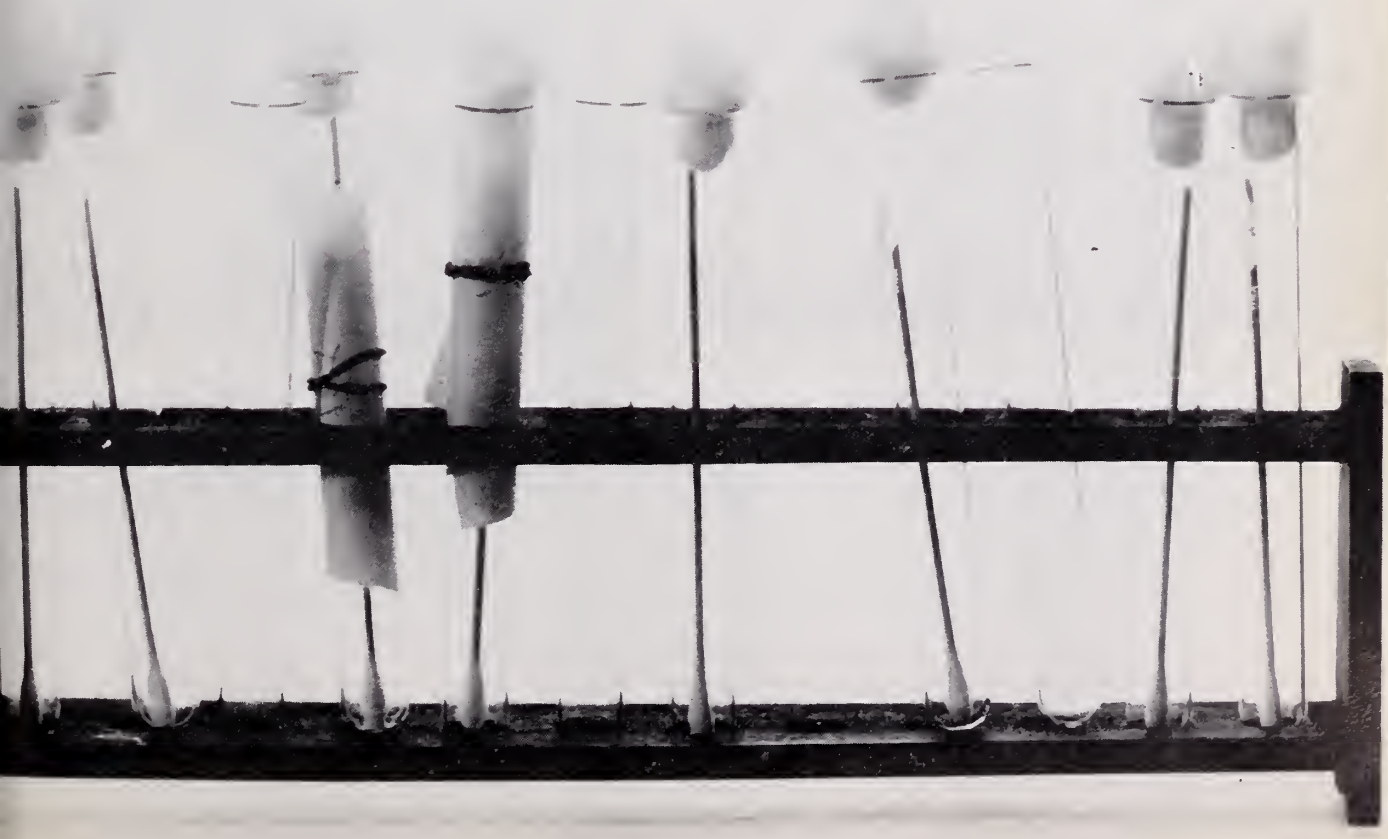
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A New Annual Meeting Scientific Program

A revision of the Association's annual meeting scientific program being planned for 1969 is so significant to every member that we asked the chairman of the Committee on Scientific Assemblies, Dr. Edwin T. Long of Lakeland, to tell us about it.—Ed.

The scientific program of the 1969 FMA annual meeting will have a "new look." For months, in cooperation with the state specialty societies, the Committee on Scientific Assemblies has been hard at work to bring about a change in format which it is hoped will improve the Association's continuing education program.

Approved by the Board of Governors, the change in effect will make two full days (May 16 and 17) of scientific information available to all members. Three choices of simultaneous programs at all times during the two days will increase a member's chance of finding material of interest throughout the scientific portion of the meeting. Since the program will reach and interest a larger number of members than in the past, it will increase the effectiveness of the Association's funds.

Resembling somewhat the sectionalized scientific meetings of organizations such as the American Medical Association and the Southern Medical Association, the scientific portion of the FMA annual meeting will consist of 12 scientific sections of medical and surgical discipline. Each section will be open to all registered Association members and guests. There will be three sections running concurrently each morning and afternoon during the two days.

Each section has been awarded to one or more cooperating specialty societies and the section is named accordingly. In cases of multiple requests for the same section, assignment has been made according to the size of the specialty group, those with the greater past attendance gaining preference. The sponsoring society or societies then assume responsibility for the program content of the section, subject to final approval of the FMA.

The Association will refer all submitted scientific papers to the appropriate specialty societies sponsoring sections. Past FMA custom has been to give Florida authors some preference in these considerations.

Each section will receive financial support from the Association for the expenses of one invited speaker within certain established limits.

Members of recognized specialty societies not sponsoring sections, of course, may attend any section meeting. Such societies may continue to hold separate closed meetings at times of their choosing, as in previous years.

Friday morning, May 16, will feature respective concurrent sections on Obstetrics and Gynecology, Otolaryngology and Preventive Medicine. Friday afternoon there will be sections on Radiology, Plastic and Reconstructive Surgery, and Chest Medicine and Surgery.

Saturday morning, May 17, will have sections on Orthopedics, Medicine, and Surgery. The Saturday afternoon sections will be Urology, Thoracic Surgery, and General Practice.

Scientific exhibits will continue to be displayed in the convention hall as in past years. It is anticipated that the entire scientific program in more detail will be published in the April issue of the JOURNAL.

EDWIN T. LONG, M.D.
LAKELAND

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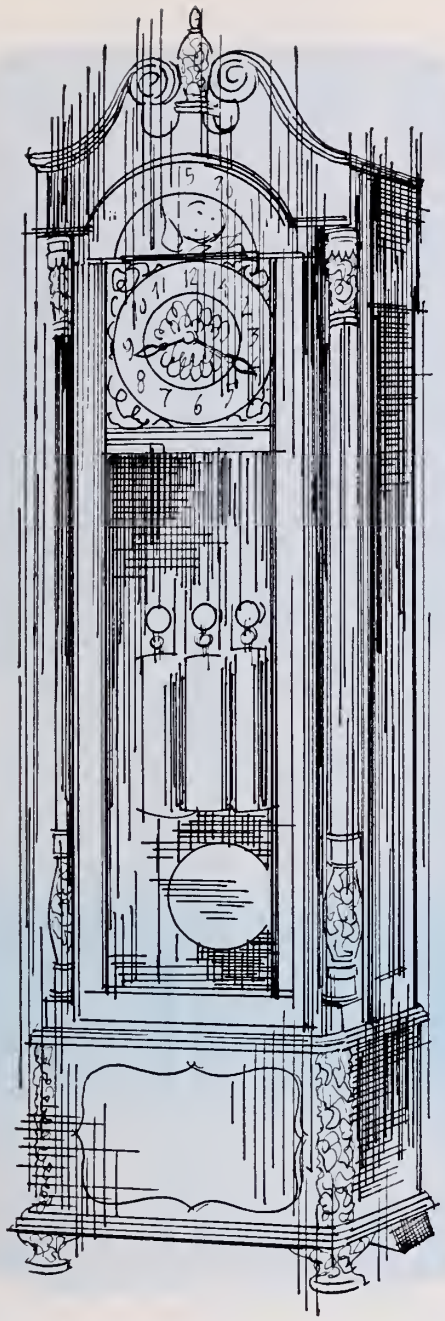


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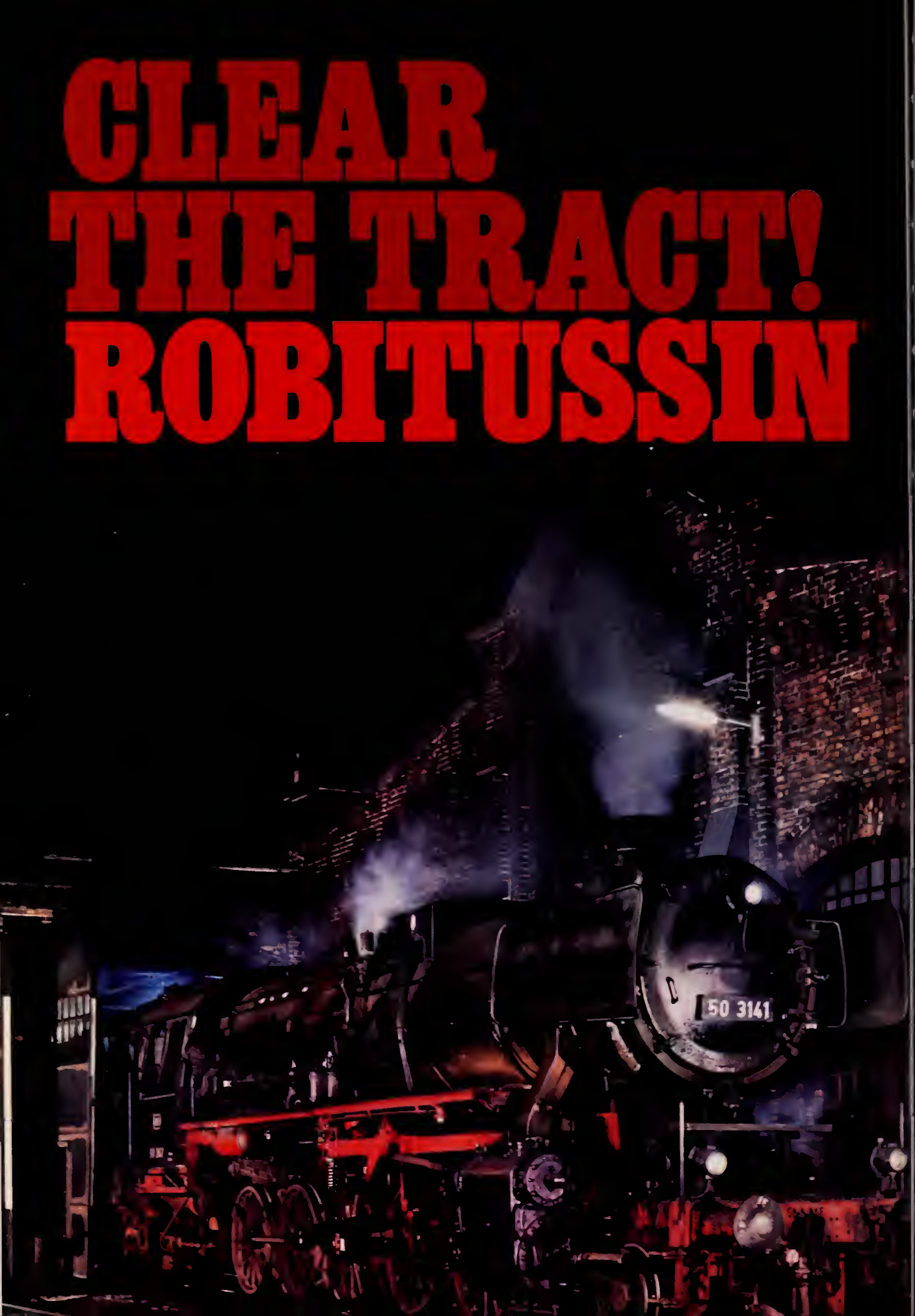


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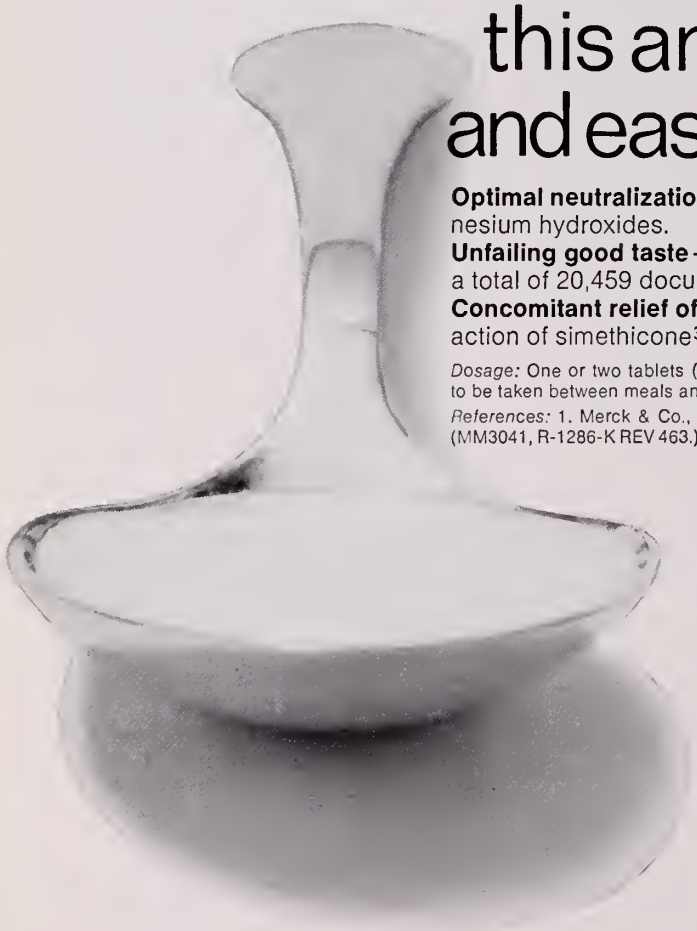
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Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth); one or two teaspoon to be taken between meals and at bedtime, or as directed by physician.

References: 1. Merck & Co., Merck Chemical Division: Antacid Literature Survey, Rahway, New Jer (MM3041, R-1286-K REV 463.) 2. Danhof, I.E., report on file. 3. Hoon, J.R.: Arch. Surg. *93*:467 (Sept.) 19

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What's Good For The Blues

Foreword

Warren W. Quillian, M.D.

In 1966 Blue Cross and Blue Shield of Florida assumed responsibility as carrier and fiscal intermediary for administration of parts A and B, respectively, of the Medicare law. Rapid growth since that time has necessitated increased facilities and personnel in our attempt to maintain efficiency and economy of operation.

While Blue Shield's insistence upon free choice of physicians, adequate benefits and financial responsibility are very important, it is the physician's role in Blue Shield that sets it apart. This is not primarily for the professional benefits, but to be sure that the public (our patients) are provided with the finest possible service.

We have gained great public acceptance and have become involved in government programs at the request of medicine. Private medicine can provide the flexibility and innovations so necessary to produce the highest quality of medical care. In this way, we can demonstrate that there is no need for further government involvement. We are serving as a buffer between government and the physician.

Many problems, some simple and some complex, have arisen in attaining our objectives. Believing in the dedication and efficiency of our excellent staff, we have asked certain key executive personnel to offer a brief resume of the major practical difficulties daily encountered in the prompt processing of claims and in our relationship with the physicians of the state. Lack of space prevents a more complete presentation. The articles which follow are original and not edited. Mr. W. J. Stansell is Assistant Executive Director for Blue Shield; Mr. Dan Lewis is Vice President in Charge of Claims. We submit their ideas and feelings for your information with the hope that you will help in the solution of these problems which affect us all.

With our mutual purposes and related activities, there has been a closer liaison between Florida Blue Shield and Blue Cross during the past two years. Much of the warm and friendly relationship between the boards of directors of the two corporations in due to better understanding, anticipation and elimination of conflicts. Mr. Frank J. Kelly, chairman of the board for Blue Cross in Florida, is highly knowledgeable concerning the problems of physicians, having served for many years as legal counsel for the Dade County Medical Association. The physician is interested in the welfare of his patient, whether at home or in the hospital. Our Florida Blue Cross board includes five physicians, all members of the Florida Medical Association. And we are delighted to have a statement from Mr. Kelly relative to our kindred interests and relationship.

At the gracious suggestion of the Editor of the Journal, short articles will appear in subsequent issues, during the spring months, concerning utilization review, usual and customary fees, and plans for new contracts. The future of Blue Shield and of the private practice of medicine depends vitally upon the interest and cooperative effort of physicians.

▶ Dr. Quillian, 140 Alhambra Circle, Coral Gables 33134.

Dr. Quillian is president, Blue Shield of Florida, Inc.

The Shield and The Cross

Frank J. Kelly, LL.B.

Those who participated in the humble beginning of the "Blues" in Florida could not be expected to have envisioned the present-day role these plans are assuming, not only in the prepayment of medical and hospital costs for subscribers, but in their new and sometimes overshadowing role of intermediary for Medicare.

That these nonprofit corporations have geared up to meet the challenges of these combined programs and to do the job well is a tribute to those comprising the administrative as well as the policy-making boards of Blue Shield and Blue Cross.

The basic elements of the responsibilities common to the "Blues" have created an interdependence now vital to the survival of each. In addition to and beyond these practical elements, however, there has developed a wholesome sensitivity and concern, one for the other, that transcends a corporate motivation of provincialism.

Dr. Quillian and other leaders of Blue Shield have carefully safeguarded this relationship, and complete compatibility continues. In lieu of jealousies, there is mutual pride in accomplishment.

This is as it should be.

▶ Mr. Kelly, 1409 DuPont Building, Miami 33131.

Blue Shield and Medicare Claims

W. J. Stansell and J. Dan Lewis

The processing and payment of claims, determination of reasonable charge, and utilization review are three of the most important responsibilities of a Medicare part B carrier. No single one of them can be done effectively without cooperation of the participating physicians.

As will be noted below, even the mechanics of the claim processing system can be made considerably more productive with the cooperation of the physician in helping his patients to complete the forms properly.

As to determination of reasonable charges, no other responsibility which Blue Shield of Florida has assumed can have as great an impact on the practicing physician. It is for this reason that the close working relationship between Blue Shield and physician organizations has been used to the greatest extent possible, giving responsible professional direction to this basically statistical endeavor.

Until recently, utilization review meant a committee of physicians examining hospital records to determine if proper use had been made of the institutional facilities. While the importance of this activity increases each time hospital costs rise, the vast amount of money paid into office practice by Medicare part B demands that standards be defined in order to measure the unusual practice against the usual. By studying many thousands of charges from individual physicians in Florida, we will try to produce such norms for the use of professional consultants and committees in reviewing cases of unusual utilization.

Two out of three Medicare claims are paid in less than 20 days from the date we receive them. Conversely, one out of three takes more than 20 days and the obvious question is, "Why the delay?" A recent study of the claims which require a longer processing time revealed that one out of four must be subjected to further investigation before the claim can be completely processed. The investigation consists of telephone calls, letters and inquiries to the Social Security Administration. Phone calls extend the processing time three to five days and letters extend it as much as 10 to 20 days. Therefore, we have attempted to utilize telephone services as often as possible.

A study of these "problem" claims indicates that the following are the major reasons for these delays:

a. Incorrect, incomplete or missing claim number.
b. Beneficiary address missing or incomplete.
c. Itemized breakdown of services needed.
d. Physician's or beneficiary's signature necessary.
e. Verification of assignment needed.
f. Anesthesia time required.
g. Diagnosis.
h. Authorization for ambulance service or durable medical equipment.

Since the 25 per cent requiring investigation represents over 1,500 individual claims per day, it can be readily understood why our plea to the physician is to help his patient and us by having his assistant complete the form for the patient or work with the patient by checking it over before it is sent in. The eight members of our physician relations team of any of our field offices will be glad to be of any assistance to the physician and his office assistants.

▶ Messrs. Stansell and Lewis, P. O. Box 1798, Jacksonville 32201.

Our Mail

Greetings to Colleagues

Dear Editor:

We were talking of greetings to colleagues in various specialties. Well, the old one to the proctologist: "How are things back your way" has provoked– I won't say inspired– an as yet incomplete set to others. For example:

Anesthesiology: Do you still have gas?

Thoracic surgery: Fifteen men on a dead man's chest!

Neurosurgery: Macbeth's plaint: There was a time that, when the brains were out, the man would die, but now they rise again, with twenty mortal murders on their crowns.

Pediatrics: How's every little thing?

Orthopedics: How are things around the old joint?

Internal medicine: How's your ceramic collection?

Additions to the list would be most welcome.

Henry H. Caffee, M.D.
Coral Gables

My Thanks

Dear Editor:

Thank you very much for your letter of October 31st forwarding a copy of the November issue of the Florida Medical Journal.

You are very thoughtful to think of me, and I appreciate having the issue.

Edmund S. Muskie
United States Senator
Washington

Unusual Fishing Companion

Hi! Franz,

I thought you might be interested in knowing that we have collected a trophy of a 6'9" Western diamondback rattler skin! He tried to board my boat while I was fishing in Falcon Lake, Rio Grande River (125 miles south of Laredo, Texas). Rattlers are not supposed to swim of choice but there he was.

I am sure the extra knowledge gained from the Florida Medical Association Journal gave me a greater confidence than I might otherwise have had in handling the situation. Frank, clinically I approached the job of skinning with trepidation and a queezy stomach. However, it was not unpleasant; absolutely no odor, no expected sliminess or noxious fluids, and the skin came off easily with only, in the main, finger manipulation after the required slitting. We have an unusual trophy.

Regards and best wishes to all.

Gene Porter
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Warning: Activation of psychosis may occasionally be observed in schizophrenic patients. Do not use in patients under 12 years old, and do not use in women who are or may become pregnant unless the clinical situation warrants the potential risk.
Precautions: Careful supervision and protective measures for potentially suicidal patients are necessary. Discontinuation of therapy or adjunctive use of a sedative or tranquilizer may be necessary in the presence of increased anxiety or agitation, hypomania or manic excitement. However, phenothiazines may aggravate the condition. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Carefully observe patients with increased intraocular pressure. Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications. Cardiovascular complications (myocardial infarction and arrhythmias) are potential risks since they have occasionally occurred with imipramine, the parent compound. Desipramine may bl the pharmacologic activity of guanethidine and related adrene neuron-blocking agents. Hypertensive episodes have been obs during surgery in patients on desipramine therapy.
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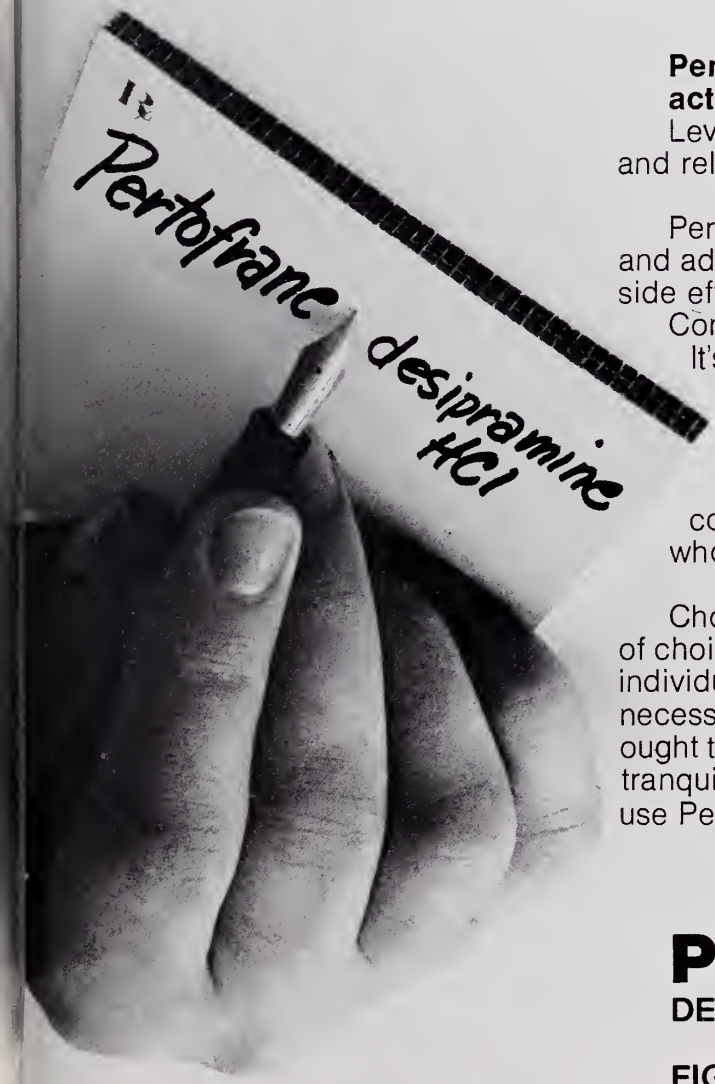
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Florida Medical | medicolegal

A Critical Analysis of the New Florida Autopsy Consent Statute

John R. Feegel, M.D., J.D.

On July 1, 1967, a new autopsy statute became law in Florida.[1] Such a law probably would escape statewide notice, since few citizens ever find themselves repetitively involved in autopsies. For pathologists, hospital administrators, hospital attorneys, funeral directors and others who may have to obtain proper consent for autopsy, this statute holds special interest.

Consent to private autopsy is required for those postmortem examinations performed on dead bodies not under the jurisdiction of the medical examiner. The basic principles and difficulties related to consent for private autopsy have been discussed elsewhere.[2-8] It is not the purpose of this paper to repeat these available discussions, but to wrestle with hypothetical situations under the newer Florida statute.

Section one of this statute[9] states, in part:

> Unless otherwise authorized by statute, no autopsy shall be performed without the written consent of the spouse, nearest relative, or, if no such next of kin can be found, the person who has assumed custody of the body for purposes of burial;

This first part of Section one is in essence a restatement of the common law relative to consent to autopsy, and is nothing new. If any difficulties can be anticipated from this section, they probably will not arise in deciding who is the spouse or who is the next of kin. Florida has abolished common law marriages,[10] which simplifies some problems while possibly creating others unrelated to autopsy consent. The statutes on probate[11-13] may be of assistance in ranking kinfolk where a dispute arises. When those who seek consent for autopsy are reasonably familiar with the principles of kinship, few real problems should arise. Similarly, the identity of "the person who has assumed custody of the body for purposes of burial" usually is clear; one need only ask the funeral director. Clearly, there is no requirement that this custodian be related in any way to the decedent; but what if the local fraternal lodge or other charitable group steps forward to pay for the funeral? Does the new statute intend such a corporate entity to be "a person" for purposes of permitting an autopsy? Corporations are "persons" for the purpose of being sued and for some other functions.[14] In other states, corporations seldom have granted a permit for autopsy except for insurance companies acting under an antemortem contract with the decedent himself.[15]

Part two of Section one[16] is an apparent protective mechanism to keep the pathologist from being involved in family dispute. It states:

> Where two (2) or more persons assume custody of the body for such purposes, then the consent of any one of them shall be sufficient to authorize the autopsy.

It must be presumed that the degree of kinship possessed by each of those assuming custody of the body for burial is equal, and that only their preference for autopsy or not is at variance. The

Dr. Feegel is associate pathologist, Tampa General Hospital, Tampa.

second portion of Section one cannot be interpreted separately from the first portion.

For example, if two surviving adult sons of a deceased widow disagree on the permit to autopsy, the pathologist can proceed on the consent of only one of them, disregarding the objections of the other son; however, if one adult son objected to an autopsy while the surviving brother of the deceased widow signed the permit, no valid authorization would exist since the son would be "nearest relative" even though the uncle might be in charge of the funeral arrangements.

In a more practical setting, it is difficult to imagine a pathologist proceeding to autopsy against known family objections regardless of the degree of kinship of the objector. It is of such stuff that heroes rather than pathologists are made.

Section two of the same statute says:[17]

> Any such written consent may be given by telegram, and any telegram purporting to have been sent by a person authorized to give such consent will be presumed to have been sent by such person.

This well intended section apparently relieves the pathologist from the responsibility, if any, of verifying fraudulent or erroneous telegrams. In fact, the hospital and the pathologist never were well equipped for such checking and frequently have relied on the apparent validity of telegrams. For the unscrupulous clinical zealot who will not rest until that autopsy is done on his patient, however, a false telegram from some exotic address now might be sufficient. When this sordid plot is unearthed after autopsy, we can hope that the statute would wrap the pathologist in a protective mantle of good faith and shield him from litigation. Clearly, this section of the statute would offer no protection to the conspiring pathologist who proceeded to the autopsy with knowledge of the fraud.

The Florida statute here again has mentioned "written" consent, but has expanded to embrace the telegram. In the face of such explicit wording, the oral or telephoned permit, albeit witnessed by several upstanding citizens, apparently would not suffice. The use of a singing telegram for this purpose is unthinkable and need not be further considered.

In the third section of the statute,[18] we approach the most involved portion of all. Section three states:

> If after diligent search and inquiry it is established by the chief law enforcement officer having jurisdiction through his examination of missing persons records and other inquiry that no person can be found who can authorize an autopsy as herein provided, then after a reasonable time, any person licensed to practice medicine under Chapter 458 or osteopathic medicine under Chapter 459, Florida Statutes and whose practice involved the usual performance of autopsies, may conduct an autopsy on the remains for purposes of confirming medical diagnosis and suspected communicable diseases, without written consent, and no cause of action will be brought against such physician for performance of such autopsy. A reasonable time for purposes of this provision shall be not less than forty-eight (48) hours or more than seventy-two (72) hours after death.

Here, the apparent intent of the legislature was to help the pathologist when no next of kin can be found and where no one steps forward to assume the custody of the body for the purpose of burial. In a large city hospital serving a community where family interrelationships frequently have dissolved, such orphans at death are not at all rare. The pathologist then was sometimes urged by well-intended clinicians, perhaps for the edification of the house staff, to proceed with the autopsy even though no valid permit was available. To persuade this reluctant prosector to disregard the lack of consent, it occasionally was suggested that the absence of kin or friend would insure the absence of a subsequent lawsuit. The wary pathologist seldom was taken in by this shallow rhetoric.

Comes now the revised statute to aid and abet those who would autopsy the dead body bereft of friend or family. In its birth pangs a law may suffer moulding and injuries which leave it with partial paralysis if not total emasculation. Section three of the autopsy statute may be such a victim. Under this section, the pathologist now must rely on the "chief law enforcement officer having jurisdiction" to search for and fail to find in the "missing persons records and by other inquiry" any person who could have authorized the autopsy. To use this section of the autopsy statute he must decide who is the "chief law enforcement office having jurisdiction." Where one practices in an area which simultaneously is in a city having a chief of police, a county having a sheriff, an active state's attorney with staff, several courts with appropriate officers, a resident F.B.I. agent, a local military reservation with quasi-autonomy or other law enforcement agencies, selection of "the chief" for purposes of this statute may be difficult. It is submitted that even if the pathologist were

to identify "the chief," and assuming that he were able to convince this officer that a law creating this duty existed, the doctor still would have to instruct the chief on just who could have authorized an autopsy. This task may not be as easy or as difficult as it seems. Either way, it easily may be frustrated and rendered ineffective.

While the diligent search is in progress, the pathologist must cool the body and his enthusiasm for no less than 48 hours nor more than 72 hours. This presumes that the hospital morgue has a suitable refrigerator or that the pathologist would not prefer to have the body embalmed in the interim. A body dead for at least two days may be of diminished anatomical value in many medical conditions, but admittedly may be adequate for other postmortem diagnoses. Where this waiting period begins toward the end of the week, the autopsy may have to be performed on Sunday or on a holiday. Suspected communicable diseases mentioned in this section as a motive for autopsy without consent may be epidemic by the 48th hour. Comfortingly, the medical examiner can autopsy without permit of kin in such cases of suspected hazards to public health.

It is suggested that a shorter waiting period, up to a maximum of 24 hours, might have been more practical and that someone from the hospital should have been appointed the proper agent to seek the kin or friend. In fact, it has been my experience that the funeral director with an obvious vested interest is the most diligent and effective person in the search for kin.

It should be further noted that while another Florida law permits a patient to donate his eyes after death,[19] the new autopsy consent statute fails to provide a mechanism for a patient's consent to his own postmortem examination.

The Florida legislature is to be commended for its efforts in passing a new autopsy law. Other states apparently have ignored the need for change in their outdated statutes. The foregoing inquiry is offered constructively and is intended only to show that despite this new law, all problems have not been yet resolved.

Autopsies continue to provide the final diagnosis to confirm or correct the clinician, instruct the house staff, reassure the family, protect the public health and maintain that required percentage for AMA approval of teaching institutions.[20]

The author is indebted to Mr. Harry M. Hobbs, Esq., of Tampa for use of his law library and for criticism.

References

1. Florida Statute Ch. 67-87, 1967.
2. Feegel, J. R.: The Private Autopsy: Problems of Consent, Denver Law Center J. 41:239, 1964.
3. Chayet, N. L.: Consent for Autopsy, New England J. Med. 274:268, 1966.
4. Chayet, N. L.: Consent for Autopsy, Bull. Coll. Am. Path. 20:387, 1966.
5. Hayt, E. and Hayt, J.: Legal Aspects of Medical Records, Berwyn, Ill.: Physician's Record Co., 1964, P. 286.
6. Stetler, C. J. and Moritz, A. R.: Doctor and Patient and the Law, (4th Ed.), St. Louis, The C. V. Mosby Co., 1962, P. 173.
7. Shartel, B. and Plant, M. L.: The Law of Medical Practice, Springfield, Ill., Charles C. Thomas Co., 1959, P. 64.
8. Gradwohl, R. B. H.: Legal Medicine, St. Louis, The C. V. Mosby Co., 1954, P. 68.
9. Florida Statute Ch. 67-87, 1967.
10. Florida Statute Ch. 67-571, 1967.
11. Florida Statute 731.03 note 5 (Heir Defined)
12. Florida Statute 731.03 note 7 (Next of kin defined)
13. Florida Statute 731.23.
14. Florida Statute 1.01.
15. Aetna Life Ins. Co. v. Lindsay, 69 F.2d 627, (7th Cir. 1934).
16. Florida Statute Ch. 67-87, 1967.
17. Ibid.
18. Ibid.
19. Florida Statute 736.10.
20. Hospital Accreditation References, (4th Ed.) American Hospital Association, Chicago, Ill., 1965, P. 131.

Dr. Feegel, Tampa General Hospital, Tampa 33606.

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26 Third Annual Seminar on the Advancement in the Diagnosis and Management of Cancer, Port-O-Call, St. Petersburg

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28-May 1 American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour

30-May 3 Neurosurgical Society of America, Key Biscayne Hotel, Key Biscayne

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2- 4 American Academy of Psychoanalysis, Deauville Hotel, Bal Harbour

2- 4 Society of Biological Psychiatry, Hilton Plaza, Miami Beach

3 American College of Psychiatrists, Deauville Hotel, Bal Harbour

4- 6 American Society for Adolescent Psychiatry, Miami

4- 9 American Society for Microbiology, Fontainebleau Hotel, Miami Beach

5- 9 American Psychiatric Association, Americana Hotel, Bal Harbour

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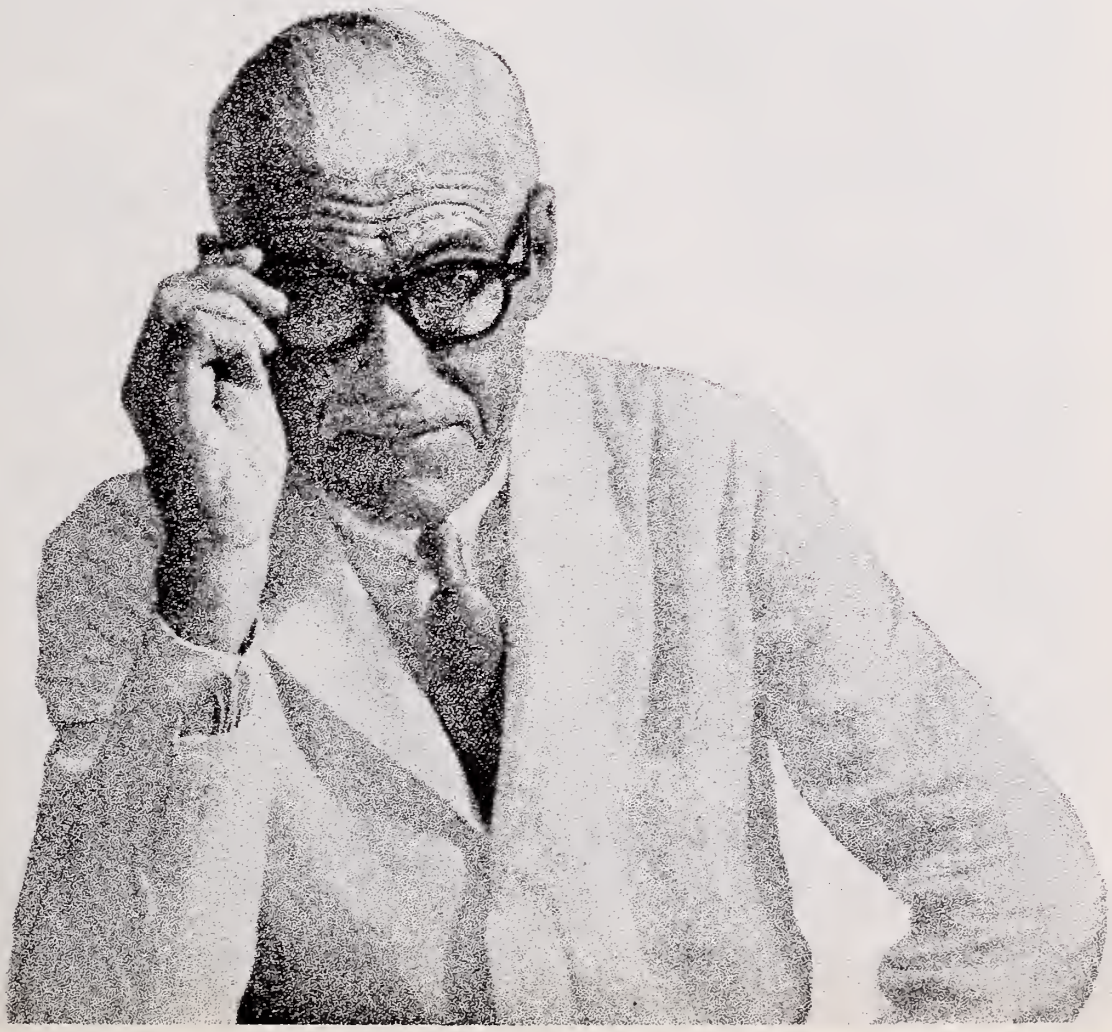
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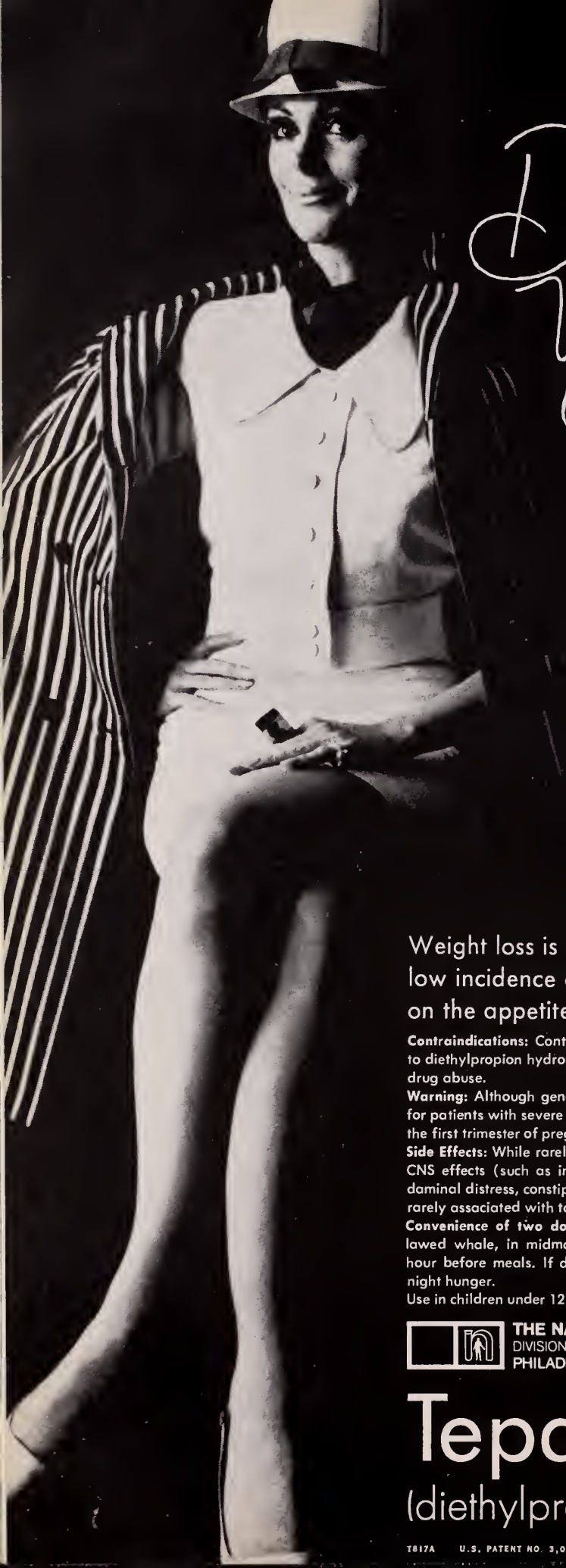
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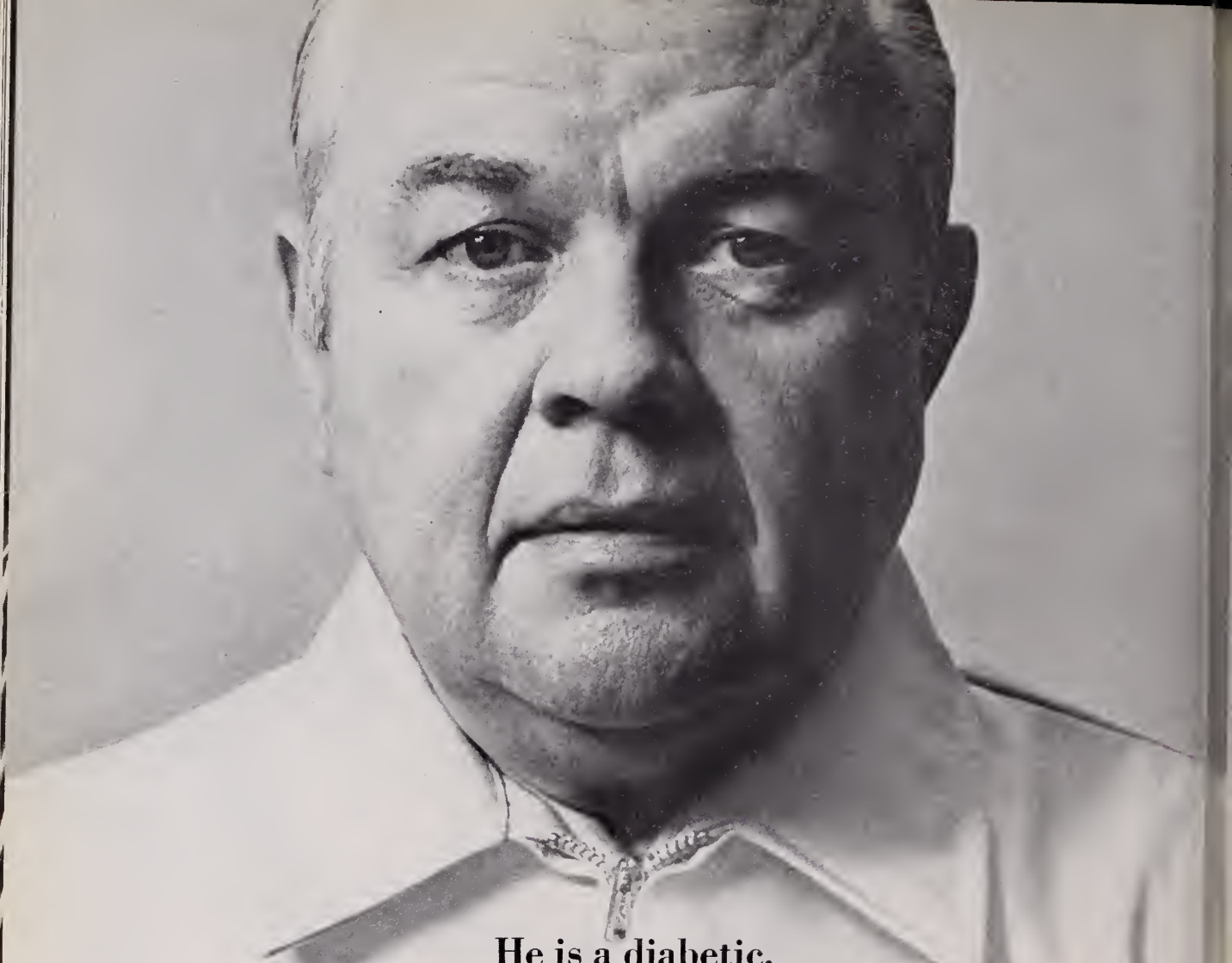
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References:

1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *8*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. 5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.



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PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A. H. F. S. Category 8:12**

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Co.
Syracuse, New York 13201



Nose clear as a whistle

(THANKS TO DIMETAPP®)

Dimetapp Extentabs® does an outstanding job of helping to clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely. Try Dimetapp. It clearly works.

FOR UPPER RESPIRATORY ALLERGIES AND INFECTIONS

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

UP TO 12 HOURS CLEAR BREATHING ON ONE TABLET

Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220

A·H·ROBINS



Owner Breaks Arm When Yacht Runs Aground

Schuyler, Oct. 31. Harry Waters of Covesville incurred a fractured arm [illegible] yacht [illegible] ck a large rock tially capsized. The fire depa[illegible] had to rescue Waters by sma[illegible] Damage to the yacht is estim[illegible] 0.

Hasn't the skipper had enough excitement for one day?

For the patient who has been through an accident, the worry and anxiety following the mishap may actually heighten the perception of pain. This is why there's a classic ¼ grain *sedative* dose of phenobarbital in Phenaphen with Codeine—to take the nervous "edge" off, so the rest of the formula can control the pain more effectively.

A.H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

Phenaphen® with Codeine

Phenaphen with Codeine Nos. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16. mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenaceti (3 gr.), 194.0 mg.; Hyoscyamine sulfate, 0.031 mg.; Codeine Phosphate, ¼ gr. (No. 2), ½ gr. (No. 3), or 1 gr. (No. 4) (warning: may be habit forming

The compound analgesic that calms instead of caffeinate

Indications: Phenaphen with Codeine provides relief in severer grades o pain, on low codeine dosage, with minimal possibility of side effects. Its us frequently makes unnecessary the use of addicting narcotics. Contraindica tions: Hypersensitivity to any of the components. Precautions: As with a phenacetin-containing products excessive or prolonged use should b avoided. Side effects: Side effects are uncommon, although nausea, con stipation and drowsiness may occur. Dosage: Phenaphen No. 2 and No. 3– 1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsul every 3 to 4 hours as needed. For further details see product literature.



Information for Authors

Manuscripts submitted for publication in the Journal of the Florida Medical Association should be double or triple spaced on white bond, including title page, illustration legends, tables and table headings, footnotes and references. Only original papers not previously published are considered for publication. Manuscripts submitted for publication are subject to review and approval by the Journal Publications Committee. All manuscript pages should be numbered consecutively. Within the manuscript, numbers one to ten should be spelled out except when used for units of measurement; for numbers above ten, arabic numerals should be used. Dorland's Medical Dictionary and Webster's International Dictionary may be used as standard references. Scientific (generic) names for drugs should be used when possible. Copyright or trade names should be capitalized when used. Submit *original* manuscript and two copies. Copying by electrostatic dry process (not wet process) is preferred to tissue copies. Retain one additional copy in your office for proofreading. All material is submitted with the understanding it is subject to editing.

Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

Other Information

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Editor

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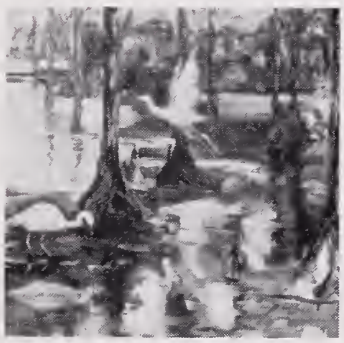
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MARCH COVER

The animal and plant residents of the Everglades invite man to enjoy the "River of Grass" with them. This unique bit of Florida was surveyed by the great-grandfather of the artist who shows us the glades on our cover—Claire Drew Thompson.



For the "Cheater Eater"

Formulas: Each 'Dexamyl' *Spansule* capsule No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid (Warning, may be habit forming). Each 'Dexamyl' *Spansule* capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital (Warning, may be habit forming).
Before prescribing, see complete prescribing information in SK&F literature or *PDR*.
Contraindications: Hyperexcitability, undue restlessness, hyperthyroidism, porphyria; in patients on MAO inhibitors.
Precautions: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence. Rarely, symptoms of toxic psychosis (hallucinations, confusion, panic states, etc.) may occur with amphetamines, usually after prolonged high dosage. In these instances, withdraw the medication. Use cautiously in pregnant patients, especially in the first trimester.
Adverse Reactions: Overstimulation, restlessness, insomnia, g.i. disturbances, diarrhea, palpitation, tachycardia, elevated blood pressure, tremor, sweating, impotence and headache.
Supplied: In bottles of 50.

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brand of sustained release capsules

curbs appetite
encourages normal activity
dispels diet discouragement

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Our Dues

After much discussion, soul searching, and thought, your administration has come to the conclusion that it is vitally necessary to request the House of Delegates in May to increase the dues of the Association from $50.00 to $75.00 a year. Some of you who were present at the Presidents and Secretaries Conference in Orlando in January are familiar with the details of why we think it has to be done.

Until 1950, the dues were $25.00 plus a $10.00 assessment. From 1951 to 1962, the dues were $40.00. From 1963 to the present time, the dues have been $50.00.

At present, the expenses are running so close to income that any unusual expense would have to be taken from reserves. If the Association wishes to engage in any new activities or even continue our present work, it will be necessary to have more money.

We are grateful to Mr. Harry Gray, who has been our attorney through the years. His fees have been token charges for the tremendous amount of work he has done for us. We can only guess the costs to us as the legal requirements increase even more in the future.

The Association should consider paying council and committee travel for at least two meetings a year. These men give a tremendous amount of time and effort in work for the membership. They, at least, should be reimbursed for travel.

Our alternate delegates to the AMA should be reimbursed for their travel expenses. Some of them go to meetings consistently at their own expense. Other alternates never attend.

It is hoped that the Association will be able to start doing the billing for county medical societies. For years, they have collected our dues for us and, for some societies, it works a real hardship, particularly those which do not have executive personnel.

The annual meetings of the legislature mean that our legislative expense will double, even if we do not expand our work. Money for legislative expense will continue to increase. We also need to expand our national legislative program, so that our key contact physicians can do more here in the state, not just once a year in Washington.

Continuous re-evaluation of the Relative Value Studies will require from $15-$25,000 per year if we keep up to date.

For these and many other reasons, we feel that our Association must raise the dues or neglect many of the things that have to be done to protect our interests.

I hate to go down in the annals as one of the Presidents who "raised the dues," but I can see no alternative.

Happy St. Patrick's Day!

Jack A. Cleveland

So he'll breathe easier:

relieve anxiety while you relieve pain.

Relief of pain is usually a major goal in traumatic conditions. But often of importance, too, is alleviation of anxiety and tension that may heighten patient discomfort.

Single-prescription, non-narcotic Equagesic may effectively relieve pain. *And* ease anxiety and tension.

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Equagesic®

(meprobamate and ethoheptazine citrate with aspirin)

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IN BRIEF.

Contraindications: History of sensitivity or severe intolerance to aspirin, meprobamate or ethoheptazine citrate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore, it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics—has resulted in dependence or habituation. Withdraw gradually after prolonged excessive dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance, with resultant slowed reactions and impaired judgment and coordination. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, patients should not operate machinery or drive. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously and in small amounts to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with gastric lavage and appropriate symptomatic therapy (CNS stimulants and pressor amines as indicated). Two instances of accidental or intentional significant overdosage with ethoheptazine and aspirin have been reported. These were accompanied by CNS depression (drowsiness and lightheadedness) but resulted in uneventful recovery. On basis of pharmacologic data, CNS stimulation could be anticipated, with nausea, vomiting and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]).

Adverse Reactions: Ethoheptazine and aspirin may cause nausea with or without vomiting and epigastric distress, in a small percentage of patients. Dizziness is rare at recommended dosage. Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses. Such patients may have had no previous contact with meprobamate and may or may not have an allergic history. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, discontinue meprobamate; do not reinstitute. Severe reactions, observed very rarely, include fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. These cases should be treated symptomatically including, when indicated, such medication as epinephrine, antihistamine and possibly hydrocortisone. A few cases of leukopenia, usually transient, have been reported on continuous use. Rarely, aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported, almost always in presence of known toxic agents.

Overdosage: See precautions section for management of overdosage.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

Photo professionally posed.







The Fortunate One.

Her urinary tract infection reveals itself through pain and discomfort.

While the pain and discomfort of a G.U. infection are anything but pleasant, the patient may be luckier than she realizes. That burning sensation (and/or frequency, urgency, dysuria) is a usually reliable sign of a urinary tract infection. And it's her good fortune that her infection won't go undetected...or untreated.

Azo Gantanol® therapy usually provides analgesic action within one-half hour, while control of the infection begins within two hours. Azo, a specific urinary analgesic, soothes inflamed mucosa to give symptomatic relief. At the same time, the antibacterial component, Gantanol (sulfamethoxazole), achieves therapeutic levels in the blood and urine, with diffusion into interstitial fluids. Azo Gantanol—a good choice when urinary tract infection reveals itself through symptomatic distress.

Before prescribing, please consult complete product information, a summary of which appears on opposite page.

Azo Gantanol®

(Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.)

Azo for the pain
Gantanol®
(sulfamethoxazole)
for the pathogens

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Urinary tract infections with associated pain or discomfort when due to susceptible organisms; prophylactically in urologic surgery, catheterization and instrumentation.

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, newborn infants during the first three months of life, glomerular nephritis, severe hepatitis, uremia and pyelonephritis of pregnancy with gastrointestinal disturbances.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In closely intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus and rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

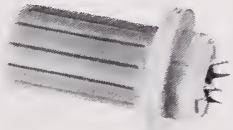
Dosage: Adults—4 tablets initially, then 2 tablets morning and evening.

How Supplied: Tablets, bottles of 50.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

TB is still around.

In 1967 almost 45,000 new active cases were reported. Isn't that a good reason to make tuberculin testing with the white LEDERTINE™ Applicator a routine part of your physical examinations?



TUBERCULIN TINE TEST
(Rosenthal) with Old Tuberculin

Precautions: With a positive reaction, consider further diagnostic procedures. Use with caution in persons with active tuberculosis or known allergy to acacia. Vesiculation, ulceration, or necrosis may occur at the test site in highly sensitive persons.

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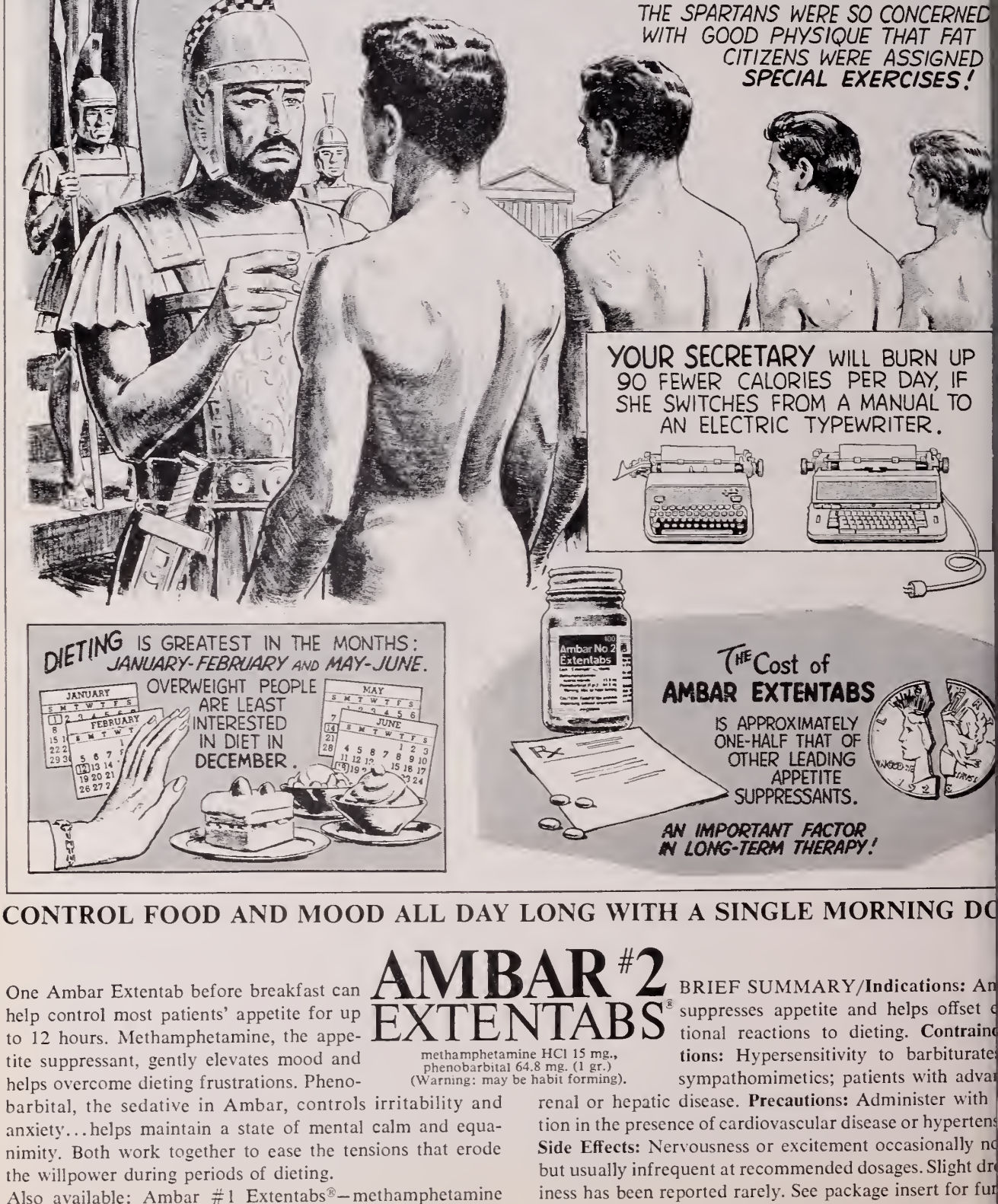
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Obesity Oddities

FACT & LEGEND



CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Am... suppresses appetite and helps offset e... tional reactions to dieting. **Contraind...tions:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with ...u-tion in the presence of cardiovascular disease or hypertens...m. **Side Effects:** Nervousness or excitement occasionally no...d but usually infrequent at recommended dosages. Slight dro...siness has been reported rarely. See package insert for fur...er details.

A. H. ROBINS COMPANY,
RICHMOND, VA. 23220

A·H·ROBINS

See next page for prescribing informati



You've made it one of your specifics in acute otitis media

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE



You've made it one of your specifics in acute otitis media

DECLOMYCIN acts against many strains of H. influenzae, pneumococci and streptococci, th most common invaders. In otitis media, where it is difficult to isolate the causative organism, this coverage may be important. However, some strains may be resistant and other pathogens can be involved.

You've found the high serum levels of DECLOMYCIN important, too. Its prolonged actio permits convenient 300 mg b.i.d. or 150 mg q.i.d. administration.

When specimens are obtainable, your culture studies will indicate the usefulness of DECLOMYCIN.

Effectiveness: DECLOMYCIN Demethylchlortetracycline should be equally or more effective therapeutically than other tetracyclines in infections caused by organisms sensitive to the tetracyclines.

Contraindication: History of hypersensitivity to demethylchlortetracycline.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocoli pruritus ani. Skin—maculopapular and erythematous rashes; a r case of exfoliative dermatitis has been reported. Photosensitivi onycholysis and discoloration of the nails (rare). Kidney—rise in BU apparently dose-related. Transient increase in urinary output, som times accompanied by thirst (rare). Hypersensitivity reactions—u caria, angioneurotic edema, anaphylaxis. Teeth—dental staining (y low-brown) in children of mothers given this drug during the latter h of pregnancy, and in children given the drug during the neonatal pe od, infancy and early childhood. Enamel hypoplasia has been seen a few children. If adverse reaction or idiosyncrasy occurs, discontin medication and institute appropriate therapy. Demethylchlortet cycline may form a stable calcium complex in any bone-forming tiss with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Shou be given 1 hour before or 2 hours after meals, since absorption impaired by the concomitant administration of high calcium conte drugs, foods and some dairy products. Treatment of streptococ infections should continue for 10 days, even though symptoms ha subsided.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Capsules: 150 mg; **Tablets:** film coated, 3 mg, 150 mg and 75 mg of demethylchlortet cycline HCl. 39

LEDERLE LABORATORIES, A Division of
American Cyanamid Company, Pearl River, New York

Lederle

now she can cope...

hanks to

Butisol SODIUM®
SODIUM BUTABARBITAL)



he "daytime sedative" for veryday situational stress

When stress is situational—environmental pressure, worry over illness—the treatment often calls for an anxiety-allaying agent which has a prompt and predictable calming action and is remarkably well tolerated. BUTISOL SODIUM (sodium butabarbital) meets this therapeutic need.

After 30 years of clinical use . . . still a first choice among many physicians for dependability, safety and economy in mild to moderate anxiety.

Contraindications: Porphyria or sensitivity to barbiturates.

Precautions: Exercise caution in moderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement or depression.

Adverse Reactions: Drowsiness at daytime sedative dose levels, skin rashes, "hangover" and systemic disturbances are seldom seen.

Warning: May be habit forming.

Usual Adult Dosage: As a daytime sedative, 15 mg. (¼ gr.) to 30 mg. (½ gr.) t.i.d. or q.i.d.

Available for daytime sedation: Tablets, 15 mg. (¼ gr.), 30 mg. (½ gr.); Elixir, 30 mg. per 5 cc. (alcohol 7%).

BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg. (¼ gr.), 30 mg. (½ gr.).

McNEIL

McNeil Laboratories, Inc., Fort Washington, Pa.



If you think the pink pill for U.R.I. symptoms is built for speed and endurance you're on the right track.

re is a tablet that begins to relieve mptoms of upper respiratory infec- n quickly—a tablet that works for urs to make it easy for your patient enjoy continuous relief.
ovahistine Singlet combines effective sage of an antipyretic-analgesic th a vasoconstrictor-antihistamine rmulation to relieve not only the ngestion, but also the fever and e aches and pains that almost always company upper respiratory infections.

A total daily dosage of 3 or 4 tablets will normally provide the continuous relief your patient expects. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

PITMAN-MOORE Division of The Dow Chemical Company, Indianapolis, Indiana.

Novahistine® Singlet decongestant-analgesic

(Each tablet contains: phenylephrine hydrochloride, 40 mg.; chlorpheniramine maleate, 8 mg.; acetaminophen, 500 mg.)

Dow

Symbols in a life of psychic tension

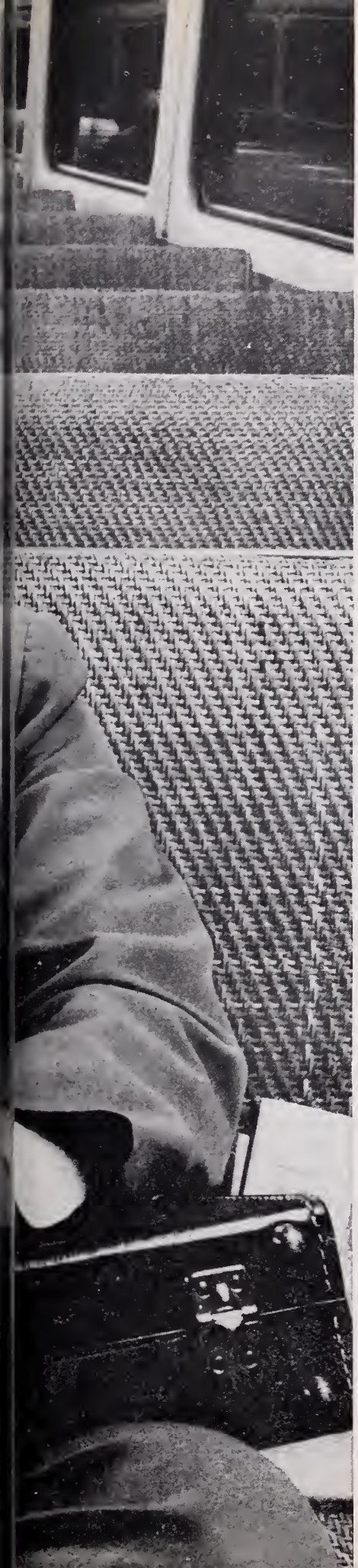
B.A.
cum laude

V.P.
at thirty-two

ECG
and complete examination normal (persistent palpitations)



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Nutley, New Jersey 07110



Rx

Valium® (diazepam) *t.i.d.* and *h.s.*

B.A. (*cum laude*)...V.P. (at thirty-two)...symbols that illuminate the quality of a life...the satisfactions of achievement, as well as its price...the pressures and stresses that can often create cardiac manifestations of psychic tension. For this kind of patient—with no demonstrable pathology—consider the singular benefits of Valium (diazepam).

With its pronounced calming action, Valium can relieve psychic tension promptly, attenuating its somatic signs and symptoms. Further, Valium is distinctly useful when somatic and depressive symptomatology (secondary to psychic tension) coexist. And Valium is generally well tolerated; in proper maintenance dosage, it seldom dulls the senses or interferes with functioning.

When psychic tension-related insomnia appears, an *h.s.* dose added to the *t.i.d.* schedule helps promote sleep.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Contraindication: Penicillin hypersensitivity.

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Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

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Research in Psychiatry

Recent and Current Programs at the University of Florida

Marshall B. Jones, Ph.D. and Robert L. Williams, M.D.

The publications of an academic department with more than 30 members can be expected to be diverse and varied; the field of psychiatric investigation includes many subspecialties and interdisciplinary areas. Perhaps, if a department chose as a matter of policy to limit research activities to a few fields, for example, drug, sleep or primate research, some kind of unity in the product might emerge, but the department of psychiatry at the University of Florida has not chosen this course. To channel efforts toward specific targets would be to sacrifice the unity of psychiatry and behind it the unity of man as a biosocial individual in favor of an artificial and essentially trivial unity in departmental activity. If we hope to arrive at an integrated understanding of the human mind, we must approach our study from every potentially fruitful angle. If this multi-angled strategy produces results which appear at times to be disjointed or even chaotic, it is the price we pay for clinging to the most inclusive and holistic traditions of psychiatric investigation.

Dr. Jones was formerly assistant professor, department of psychiatry, College of Medicine, and assistant professor, department of psychology, College of Arts and Sciences, University of Florida, Gainesville; now associate professor, department of behavioral science, College of Medicine, Pennsylvania State University, Hershey.

Dr. Williams is professor and chairman, department of psychiatry, University of Florida College of Medicine, Gainesville.

This review covers the published work of the department in calendar years 1965, 1966 and 1967. For several reasons it is tempting to impose some kind of systematic rubric on these efforts, despite their volume and diversity. It might be useful, for example, to distinguish between reviews and theoretical writings, "basic" investigation, and clinical research, as was done in the last summary of the department's research activity.[1] To do so, however, would be to stretch the work into an artificial configuration. Research activity is itself organic; it grows along lines dictated by the interests and abilities of those who conduct it, by the success and failure of their efforts, and by the surrounding intellectual context in which the work takes place. The alternative, which has been adopted in this review, is to follow the subject matter as it presents, in its own terms.

Three lines of work have been pursued with an attention and industry that give them outstanding positions in the department's output as a whole:

(a) "Behavioral Science Contributions to Psychiatry," published by Little, Brown, Inc. in 1965.

(b) The continuing and basic work of the Sleep Laboratory under the direction of Drs. Robert L. Williams, Wilse B.

Webb and I. Karacan.

(c) The intense investigative activity of the division of liaison psychiatry headed by Dr. John J. Schwab.

This review will sketch each of these three programs and conclude with an account of the rest of the department's published work.

Behavioral Science

"Behavioral Science Contributions to Psychiatry" was edited by Drs. Peter Regan and Evan Pattishall, then chairman of the department and chief of the division of behavioral sciences respectively.[2] The volume opens with an introductory chapter by Dr. Pattishall and closes with a summary chapter by Dr. Regan. The nine substantive chapters in between are general reviews with emphasis on current work and applications to psychiatry.

The second chapter, "Behavior Genetics" by Dr. Marshall Jones, summarizes the known findings, principally in animals, of the role of genetics in shaping behavior. The chapter concludes with some data and comments on the genetic basis of the major psychoses.

The next two chapters, entitled "Ethology: the Concept of Fixed Motor Patterns" and "Ethology and Human Character Formation," were written by Dr. Sol Kramer. The first is a general review of the fixed motor pattern as a particulate unit of behavior and its role in evolutionary theory. The chapter deals in considerable detail with several well-known ethological phenomena including releasers, vacuum activity, displacement and superposition. In the second chapter Dr. Kramer develops a theory of character formation on ethological foundations and relates it to psychoanalysis, character analysis, LSD analysis and neurophysiology.

The next four chapters, "Anthropology" by Dr. Harry Hutchinson, "Sociology" by Dr. Eugene Smith, "Psychological Processes in the Cognition of Personality" by Dr. Dennis Wilson, and "Development and Learning" by Dr. Ira Gordon, are summaries of key findings and ideas in the several areas they cover. Dr. Wilson's chapter is particularly valuable for its delicate handling of recent work on role relations, projection, and cognitive dissonance.

The last two chapters are "Clinical Psychology: Current Status" by Dr. Louis Cohen and "Psychotherapy: Values in Action" by Dr. Sam Banks.

Work of Sleep Laboratory

Insofar as research is concerned, the department of psychiatry at the University of Florida is best known for its work on sleep. The sleep laboratory has been conducting basic research for several years. Before the period covered by this review the laboratory had studied typical sleep patterns in young adult males.[3] Early in 1966 this investigation was extended to young adult females.[4] The times allocated to the several stages of sleep were essentially the same in females as in males; also, additional evidence was found to support the hypothesis that each individual spends a characteristic amount of time in each sleep stage. A third study examined typical sleep patterns in late middle-age males.[5] This group showed a marked reduction in stage 4 sleep and an impressive distribution of stage 0 (wakefulness) toward the last third of the night.

Another line of work that had begun prior to the period covered in this review was sleep deprivation, principally of stage 4.[6] Drs. Williams, Agnew and Webb continued this phase of the laboratory's work with a study of stage 1—REM deprivation.[7] Drs. Webb and Agnew studied the effects of restricting young men to three hours sleep a night.[8] They found an increase in the amount of deep sleep (stage 4) during restricted sleep and, on recovery, another increase in stage 4 and sharp increase in stage 1—REM (stage 1 with rapid eye movements).

In still a third line of studies the laboratory has investigated the effects of depression and various psychopharmacologic agents on sleep patterning. Depressed patients experienced less sleep, less stage 4 and a slightly longer sleep latency.[9] Under meprobamate, subjects spent less time in sleep accompanied by low-voltage fast EEG and more time in sleep with spindling in the EEG than under placebo.[10]

A major event in the research effort of the department was the addition of Dr. Ismet Karacan to the faculty. Dr. Karacan is a distinguished sleep researcher. In his first year with the department he published a very important paper on the association of nocturnal erections in young males with stage 1—REM sleep.[11] Eighty per cent of REM periods were accompanied by erection. Dr. Karacan also found that high anxiety in the dream content tended to inhibit erection.

In addition to these studies the laboratory has investigated sleep patterns in Tay-Sachs disease, sleep in the early morning, sleep cycling, and other topics.[12-20]

Division of Liaison Psychiatry

The first article by Dr. John J. Schwab and his co-workers in what was to become an extended series of publications dealing with psychosomatic and consulting psychiatry appeared early in 1965.[21] It was a study of characteristics which differentiated medical inpatients who were referred for psychiatric consultation from those who were not. One hundred consultation patients were individually matched for age, sex, race, marital status, and date of hospitalization with 100 nonconsultation patients. The findings were that "A cluster of clinical characteristics distinguish the consultation group: (a) An increased number of chief complaints frequently subjective in character and of little variety, but related to emotional, neurological and sensory modalities, involving a few organs and systems. (b) A significantly different past history with more hospitalizations, catastrophic events in the life situation, previous contact with psychiatrists and the use of tranquilizers, as well as a marked increase in the number of intra-abdominal and gynecologic surgical procedures. (c) Only 43% of the consultation patients have positive physical findings related to their present illness. (d) The appearance of emotional lability, a depressed or inappropriate affect, and disproportionate responsiveness during the admission work-up were significant."[21]

This first article was followed by a series of four studies on different aspects of the same two groups of matched consultation and nonconsultation medical patients.[22-25] Severity of illness, timing of the request for psychiatric consultation, and the role of laboratory findings were also studied. Dr. Schwab et al then evaluated the reactions of a new sample of 30 medical inpatients to their referring physicians after referral for psychiatric consultation.[26] Two-thirds responded favorably while the remaining third were evenly split between ambivalent and negative reactions.

In the next series of studies[27-30] the team of investigators took up problems of diagnosing depression and anxiety in medical inpatients. Among the results was a consistent finding that roughly 20% of medical inpatients are depressed. "This depression," they write in a summary article,[30] "is a quantitative variation on classic melancholia, and, unless the differences in the manifestations are appreciated, errors in diagnosis result. This work provides guidelines for diagnosis that include particular symptoms, emphasize demographic variations, and help clinicians assess depression in those patients with admixtures of physical illness and depression."

The emphasis then moved to the role of social class in determining the forms which depression takes among medical inpatients. The investigators found that these forms vary as a function of class and that depressive symptoms characteristic of the middle and upper classes cannot be assumed to hold for lower socioeconomic groups.[31-32]

The team of workers in the division of liaison psychiatry have also pursued a variety of themes that branch off at one point or another from the main line of their research activity. These efforts include papers on the training of psychiatric residents, the role of self concept and body image, implications for drug therapy and other forms of treatment, technical problems and other subjects.[33-49]

Remaining Published Works

The evaluation of psychopharmacologic agents is included in the research program of almost every department of psychiatry, and Florida's is no exception. Under the general direction of Dr. John Ainslie the department produced four articles having to do with drug research in the years 1965-67. The first was a study of suggestion and the placebo response which found that improvement in the first week of therapy was strongly correlated with susceptibility to direct suggestion, as measured by Eysenck's Press Test.[48] The finding was the first empirical demonstration in a clinical context that suggestion plays a role in the placebo response.

Spurred by this success, the drug research unit developed a placebo washout method that is now widely used.[19] The method consists of placing all patients in a drug evaluation project on placebo for the first two weeks of treatment. Washing out the effects of prior medication has long been routine. In the "Florida method" the placebo response washes out concurrently with prior medication. The consequence is a major improvement in the efficiency of design. In two subsequent studies[50-51] the Florida group was able to demonstrate a positive effect of imipramine over both placebo and niamid with only a dozen patients in each of the two experimental groups.

Research on children is much less widespread than drug research, yet here too the department has been active. The principal work was a study by Offord and Aponte of the effect on family life of congenital heart disease in a child.[52] The find-

ings indicated that overprotection by the mother was mediated in its effect on the family and the child by distortion of the child's infirmity. Where there was no distortion the unhappy effects of the congenital defect were minimal.

Meanwhile, Dr. George Barnard on the inpatient unit of the teaching hospital was developing a new mode of treatment for adult disorders.[53] Motoric therapy is designed to permit the release of suppressed hostility in action. The method involves the provoking and encouragement of various forms of physical aggression through the use of clay, balls, pillows, and outright physical contact. When the method works, an ability to express and deal with hostility is achieved by people who had formerly presented as subdued, submissive, and often, severely depressed. With a combination of motoric and behavior therapy, Dr. Barnard successfully treated a case of psychogenic urinary retention of 15 years' standing that had previously been treated to no avail with medications, surgical procedures, catheterizations, electroconvulsive therapy, sodium amytal therapy, and psychotherapy.[54]

In the midst of these diverse efforts to achieve a better understanding of psychiatric disorders and better methods for treating them, the department also found time to study various "old-timey" remedies that continue to be used around and about Gainesville for all sorts of ailments. In an intensive study of 725 families in Lafayette County, Mrs. Alice Murphree found a frank majority had used folk medicines and only a fraction claimed "never to have used none."[55] She described a colorful variety of teas, poultices, salves, and plasters that are still used, primarily by rural residents, for the cure of everything from constipation to an unwanted pregnancy.

Conclusion

These brief sketches describe only part of the department's activity; much else remains.[56-91] Research is a fluid undertaking. It moves hither and yon as need, curiosity, capacity and good fortune suggest. The department has major resources for research on sleep, primate behavior and ethology generally. The addition to the department of Dr. Richard Gordon gives it a new capacity to pursue investigations in social psychiatry. The inpatient and outpatient services continue to provide an excellent setting for clinical research. The department's research enterprise is today more vital and varied than ever before. No one can be sure, whatever present signs may suggest, what the next few years will produce. This is the essence of research, its excitement and its risk.

References are available upon request from the authors.

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Long Term Use of Acetohexamide In Maturity-Onset Diabetes Mellitus

Federico R. Justiniani, M.D., Alfredo A. Lopez-Gomez, M.D., and Seymour L. Alterman, M.D.

Approximately 30% of patients with diabetes are being treated with oral hypoglycemic agents. One of us (S.L.A.) in a previous paper[1] reported a clinical evaluation of acetohexamide.* The chemical structure was described and results presented from study of a group of 24 patients. The purpose of this paper is to report results obtained in a different group of 61 patients treated with acetohexamide. These patients had uncomplicated maturity-onset diabetes mellitus.

Methods and Materials

Sixty-one patients were selected from the Diabetic Clinic at Mount Sinai Hospital of Greater Miami for this study. Pertinent data are summarized in Table 1. The ages ranged from 44 to 84 years. The mean age was 70 years for males and 62 years for females, with a standard deviation of 8.3 years and 11.5 years respectively. Thirty-two patients were male and 29 female. The duration of disease ranged from a few months to 22 years with the mean duration seven years for males and 6.6 years for females. Standard deviations were 4.8 and 5.8 respectively. The mean length of treatment for females was 15.3 months with a standard deviation of 10 months. For males it was 14.9 months with a standard deviation of 10.8 months.

During this study, daily doses of acetohexamide ranged from 0.25 Gm. to 1.5 Gm. The mean daily doses were 0.71 Gm. and 0.64 Gm. for males and females respectively. Medication was given as a single morning dose.

Mean fasting glucose levels at the beginning of the study were 168 mg.% for males and 156 mg.% for females.

A review of previous therapy revealed that 37 patients were on tolbutamide prior to our study, 13 on chlorpropamide and nine on diet alone. One patient had been taking insulin and one was already on acetohexamide.

Results

The results of this study are summarized in Figure 1 and Table 2.

Glucose levels in 13 patients were controlled with daily doses of 0.25 Gm. acetohexamide. Blood sugars in this group before treatment averaged 134 mg.% for females and 184 mg.% for males. The values after treatment with acetohexamide averaged 117 mg.% and 124 mg.% respectively.

In 18 patients who received daily doses of 0.5 Gm. acetohexamide, fasting blood sugars prior to therapy averaged 169 mg.% for females and 150 mg.% for males; blood sugars at the end of the study averaged 123 mg.% and 137 mg.% respectively.

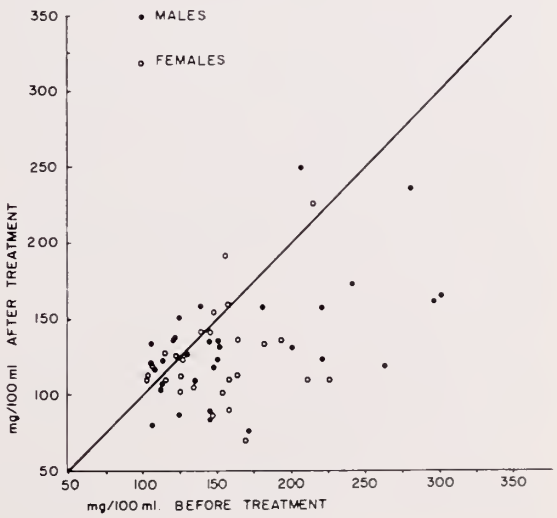


Fig. 1. — Blood glucose before and after therapy.

From the department of internal medicine, Mount Sinai Hospital of Greater Miami, Miami Beach.

*Dymelor,® Eli Lilly Co., Indianapolis, Ind.

Table 1. — Pertinent Data on 61 Patients on Long Term Acetohexamide Therapy

Patient Characteristics	Mean		Standard Deviation	
	Males	Females	Males	Females
Number of patients	32	29		
Age	70	62	8.3	11.5
Duration of diabetes (years)	7.0	6.6	4.8	5.8
Weight in pounds (end of treatment)	154	149	29	39
Length of treatment (months)	14.9	15.3	10.8	10.0
Blood sugar in mg. per cent (beginning of treatment)	168	156	71	43
Blood sugar in mg. per cent (end of treatment)	133	126	37	32
Daily dose of acetohexamide in Gm.	0.71	0.64	0.39	0.44

Seven patients required doses of 0.75 Gm. daily, with mean initial blood sugars of 204 mg.% for males and 173 mg.% for females. Mean final blood sugars were 129 mg.% and 87 mg.% respectively.

Fourteen patients required doses of 1.0 Gm. daily. They had mean initial fasting blood sugars of 152 mg.% for males and 156 mg.% for females. Final mean values were 136 mg.% and 139 mg.% respectively.

In six patients, daily doses of 1.5 Gm. acetohexamide were used. Their mean initial blood sugar levels were 285 mg.% for males and 184 mg.% for females. Their final mean blood sugar values were 134 mg.% and 174 mg.% respectively.

Definitive dosage requirements could not be accurately obtained in four patients.

Forty-five patients reported no adverse effects from the various dosages. Eight complained of epigastric pain, seven of dizziness or weakness and three of dryness of the mouth. One developed dermatitis and one duodenal ulcer. We could not rule out the possibility that other medications as well as emotional factors could have accounted for the reported adverse effects.

Figure 1 shows that at the conclusions of the study, 43 patients on acetohexamide were maintained in fair to good control throughout the length of the project.

Ten patients were lost to follow-up and one died of unrelated causes. Two patients were taken off the drug and were well controlled by diet alone. Four were switched back to either insulin, tolbutamide, chlorpropamide or phenformin. Seventeen patients required the addition of phen-

Table 2. — Relation of Dose of Acetohexamide to Glucose Control in Males and Females

	Dose of Acetohexamide (Gm.)				
Males—Total: 30	0.25	0.50	0.75	1.00	1.50
Before Treatment					
Number of Patients	3	14	4	7	2
Mean Blood Sugars	184	150	204	152	185
After Treatment					
Number of Patients	3	14	4	7	2
Mean Blood Sugars	124	137	129	136	134
Females—Total: 27					
Before Treatment					
Number of Patients	10	4	3	7	3
Mean Blood Sugars	134	169	173	156	184
After Treatment					
Number of Patients	10	4	3	7	3
Mean Blood Sugars	117	123	87	139	174

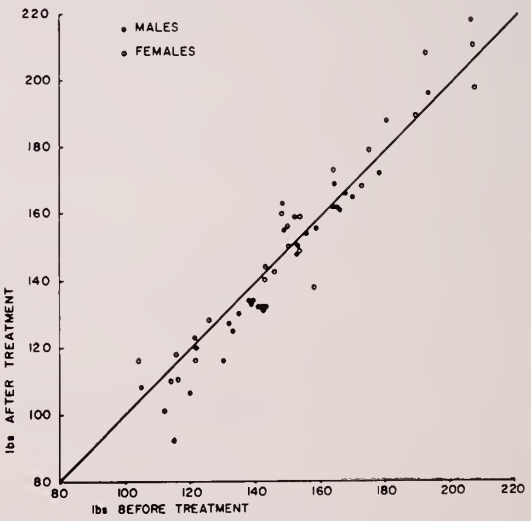


Fig. 2. — Body weight before and after therapy.

formin to their regimen of acetohexamide in order to achieve optimal control.

Body weights (Fig. 2) of the patients showed no significant change after the study period compared to pre-study weights.

Conclusions

1. Diabetes in the majority of our patients was easily managed and controlled with acetohexamide therapy, especially those requiring daily doses ranging from 0.25 Gm. to 1.0 Gm. Patients requiring more than 1.0 Gm. daily usually were not as well controlled and required the addition of phenformin to the regimen.

2. Acetohexamide was very well tolerated. The incidence of adverse effects was negligible and could not be totally attributed to the drug in these 61 patients.

3. Administration of the drug in a single morning dose was found to be efficacious.

4. There were no significant changes in the body weights of this group of patients.

Summary

Results obtained from administration of a single morning dose of acetohexamide to 61 patients with maturity-onset, uncomplicated diabetes mellitus are reported. It appears from this study that acetohexamide is an effective sulfonylurea which can control maturity-onset diabetes in the majority of patients.

This drug apparently does not alter body weight on long term administration.

References

1. Alterman, S. L., and Lieber, A. E.: Acetohexamide: Clinical Evaluation of a New Oral Antidiabetic Agent, Curr. Therapeut. Res. 6:148 (Mar.) 1964.

Dr. Alterman, 1688 Meridian Avenue, Miami Beach 33139.

Use of Ethacrynic Acid in the Ambulatory Cardiac Patient

MARTIN S. BELLE, M.D.

Ethacrynic acid has been shown to be the most potent natruretic and diuretic compound available.[1] Administered intravenously, it has been used very effectively in pulmonary edema.[2] In addition it also has proved useful in "intractable" ascites due to cirrhosis of the liver,[3] nephrotic syndrome, edema of patients taking cortisone, and edema associated with chronic renal failure.[4]

Its use in congestive heart failure has been most clearly demonstrated in patients with refractory edema.[5-7]

Since ethacrynic acid is so potent, there is some question about safely using it in the average patient with congestive heart failure; however, Sperber and his associates reported the successful control of cardiac edema in 27 outpatients.[8] They believed the drug could be used safely in clinic patients provided acute excessive diuresis is not induced by higher doses.

My associates and I successfully used ethacrynic acid without serious side effects in 20 ambulatory office outpatients with congestive failure. This is the reason for reporting our results.

Method

Twenty patients, 11 men and nine women ranging in age from 37 to 75 years, were studied. No changes in medication were made except for discontinuance of diuretics. Most of them were not well controlled by previous oral diuretics. These were class III and IV cardiac patients (AHA classification) who needed additional injections of a mercurial diuretic. The signs of congestive heart failure persisted in spite of medication used; that is, pulmonary congestion, peripheral edema and hepatic congestion. Apparently the degree of congestive heart failure was such that the available oral diuretics did not keep the patients free of signs and symptoms.

A daily dose of 50 to 200 mg. of ethacrynic acid was given. Patients returned every two to four weeks and side effects were noted. Each month for a six month period, the level of serum sodium, potassium chloride, carbon dioxide, blood urea nitrogen and serum glutamic oxalacetic transaminase was determined. A complete blood count and urine test were performed at the same time. Supplemental potassium was given to 11 patients in the form of potassium chloride from 0.5 to 3.0 Gm. daily. Patients were encouraged to use prunes, prune juice, bananas and oranges.

Results

Table 1 summarizes our experience with ethacrynic acid in these patients.

The drug was discontinued in one patient after a period of ten months because of nausea and vomiting. She had been given ethacrynic acid on two different occasions. Infrequent nausea occurred in four patients. Mild weakness was present in six patients but it must be remembered that they were group III and IV cardiacs. Occasional leg cramps occurred in only one.

The BUN elevations already were present before drug therapy except in one patient who had long-standing aortic and mitral stenosis. At no time was this patient symptomatic, and the BUN was mildly elevated before therapy was begun.

The control of clinical symptoms was excellent in eight patients; that is, they were without any symptoms of congestive heart failure on ordinary activity, or evidence of paroxysmal nocturnal dyspnea or pedal edema. The results were good in eight other patients who did not have any subjective symptoms but did have evidence of trace to 1+ pedal edema when seen in the office. This was believed due to congestive heart failure. In four others the results were only fair in that they did complain of occasional nocturnal dyspnea but at no time had any real evidence of marked decompensation, such as rales in the chest, but did

Ethacrynic acid was supplied as Edecrin by courtesy of William H. Wilkinson, M.D., Merck Sharp & Dohme Research Laboratories, West Point, Pa.

have evidence of trace to 1+ pedal edema. None of the group showed evidence of hepatic congestion or pulmonary congestion.

The electrolyte and chemical studies showed no marked deviation from normal. The uric acid was elevated in only three patients, and no symptoms of hyperuricemia were elicited in them. In none were there any real problems in maintaining normal sodium and chloride serum concentrations.

The following case summaries demonstrate the assistance of ethacrynic acid in the control of severe cardiac decompensation in our patients.

The 72-year-old man had been hospitalized three times in six months for pulmonary edema. He had arteriosclerotic heart disease with massive cardiac enlargement, bilateral mid-thigh amputation, diabetes mellitus and nephrosclerosis. He was placed on 125 mg. of ethacrynic acid daily and in the following 24 months did not have another attack of pulmonary edema.

The 74-year-old patient had complete heart block for 12 years due to arteriosclerotic heart disease. He needed repeated mercurial injections. Because of paroxysmal nocturnal dyspnea, he was placed on 150 mg. of ethacrynic acid daily. Results have been excellent for 30 months. The patient has been edema-free and has had no further attacks of paroxysmal nocturnal dyspnea. In addition, there has been no further need for parenteral mercurial injections.

The 63-year-old man had malfunction of papillary muscle and experienced continued episodes of paroxysmal nocturnal dyspnea and evidence of right-sided failure in spite of bed rest and parenteral mercurial diuretics. He was given 50 mg. of ethacrynic acid daily and over a short period lost ten pounds with disappearance of all signs and symptoms of congestive heart failure which persisted for as long as he was on drug therapy, 33 months.

The patient, aged 56, had severe arteriosclerotic heart disease and repeated evidence of failure on the left and right side in spite of diuretic therapy. He was hospitalized twice in a three months period for pulmonary edema and had several attacks of nocturnal dyspnea. On 100 mg. of ethacrynic acid daily he has been free of symptoms for 24 months.

Discussion

In our study of 20 ambulatory cardiac patients with moderate to severe heart disease and with moderate to severe congestive heart failure, ethacrynic acid has been found to be a very useful oral diuretic in controlling the symptoms of failure with very little side effects. All patients had been treated with other diuretics both orally and parenterally without good symptomatic control.

The drug had to be discontinued in only one patient due to nausea and vomiting. No serious azotemia, electrolyte or hepatic disturbances occurred.

Potassium was supplemented only when the serum potassium level dropped. It was necessary in 11 of the 20 patients; eight of these 11 patients required 1.0 Gm. three times a day while two others required only 1.0 Gm. a day and one other only 0.5 Gm. daily. However, patients were encouraged to add to the diet high potassium-containing fruits such as prunes, prune juice, bananas and oranges. For the most part, this was sufficient to maintain the serum potassium level satisfactorily.

It must be emphasized that these patients prior to taking ethacrynic acid had many problems associated with congestive heart failure and required parenteral therapy with Thiomerin or Mercuhydrin. They required hospitalization more frequently; as shown in the table these were class III and IV cardiac patients. Following ethacrynic acid therapy they were much more comfortable and the number of visits to the physician were

TABLE 1. — PHYSICAL FINDINGS.

NUMBER	SYMPTOMS BEFORE	SYMPTOMS AFTER	SUPPLEMENTAL K	NUMBER
5	IV+	1+ or 2+	None	9
11	III+	1+ or 0	KCL, Gm. 1.0, t.i.d.	11
4	III+	2+		

TYPE	NUMBER	AVERAGE AGE	CONTROL SYMPTOMS	NUMBER	DAILY DOSE AVERAGE	TIME ON MEDICINE AVERAGE	SIDE EFFECTS	BUN AVERAGE
A.S.H.D.	14	64	Excellent	7	125 mg.	14 months	Infrequent nausea, 2	26
			Good	5			Mild weakness, 4	
			Fair	2				
R.H.D.	6	52	Excellent	1	125 mg.	18 months	Infrequent nausea, 2	24
			Good	3			Mild weakness, 2	
			Fair	2				

reduced. This new diuretic-kaliuretic compound probably has unique action on the kidney in that besides working on the distal and proximal convoluted segment of the nephron, it also interferes with the physiological action of the loop of Henle.

It is interesting that no trouble was encountered with the sodium and chloride levels in the blood serum; at no time did patients develop symptoms of hyponatremia or hypochloremia or alkalosis.

Summary

Twenty ambulatory cardiac patients with congestive heart failure who had been poorly controlled with other oral or parenteral diuretics were given ethacrynic acid orally. This compound enabled favorable control of the symptoms of congestive heart failure with minimal side effects.

It appears that ethacrynic acid is useful in the ambulatory cardiac patient with moderately advanced to advanced congestive heart failure not only by favorably controlling the symptoms of congestive heart failure but by eliminating frequent hospital admissions and reducing the number of visits to the physician. Symptoms in these patients heretofore were difficult to control except by a combination of oral diuretics, parenteral mercurials, fairly frequent hospitalization and visits to the physician.

References

1. Cannon, P. J.; Ames, R. P., and Laragh, J. H.: Methylene Butyryl Phenoxyacetic Acid. Novel and Potent Natriuretic and Diuretic Agent, J.A.M.A. 185:854-863 (Sept. 14) 1963.
2. Rosenberg, B.; Dohkin, G., and Rubin, R.: Intravenous Use of Ethacrynic Acid in Management of Acute Pulmonary Edema, Am. Heart J. 70:333-336 (Sept.) 1965.
3. Steigman, F., and Oz, R.: Diuretic Effects of MK-595 in Cirrhotics with "Intractable" Ascites, Fed. Proc. 23(1):438 (March-April) 1964.
4. Hagerdorn, C. W.; Kaplan, A. A., and Hulet, W. H.: Prolonged Administration of Ethacrynic Acid in Patients with Chronic Renal Disease, New England J. Med. 272:1152-1155 (June 3) 1966.
5. Cannon, P. J.; Heinemann, H. O.; Stason, W. B., and Laragh, J. H.: Ethacrynic Acid, Effectiveness and Mode of Diuretic Action in Man, Circulation 31:5-18 (Jan.) 1965.
6. Muller, P., and Schauh, F.: Experimental and Clinical Studies with Ethacrynic Acid, a New Chemical with Diuretic Activity, Klin. Wschr. 42:958-965 (Oct. 1) 1964.
7. Maher, J. F., and Schreiner, G. E.: Studies on Ethacrynic Acid in Patients with Refractory Edema, Ann. Int. Med. 62:15-29 (Jan.) 1965.
8. Sperber, R. J.; DiRe, L. B.; Singer, M. M.; Fisch, S., and DeGraff, A. C.: Ethacrynic Acid in Pathological Fluid Retention, J.A.M.A., 191:703-706 (Mar. 1) 1965.

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Use of Urea in the Herniated Intervertebral Disc Syndrome

A Preliminary Report

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Protruding intervertebral discs may cause nerve root compression and swelling. Acute back muscle spasm, radicular pain, and neurologic defects may result. Treatment is aimed at reducing the compression and swelling by a host of conservative methods. Bed rest has been the reasonable and standard first method of treatment. Adjunctive therapy has included heat, traction, local injections of steroids, anesthetic agents and various physical therapeutic methods. When conservative treatment fails, surgery may be offered to relieve the patient's symptoms.

In this preliminary report, 25 patients with nerve root compression syndromes have been treated with intravenous urea. It was thought that urea might reduce the swelling of the nerve root and possibly reduce or eliminate the symptoms. The results of study are evaluated in this report.

Method

The 25 patients were divided into three major groups according to history and physical findings.

GROUP I.—This group represented classical cases of herniated lumbar intervertebral disc and most were candidates for surgery. Almost all had had conservative treatment either at home or in the hospital without benefit. Their histories were typical—pain in the lumbosacral area with radiation down the posterolateral aspect of the leg. The pain was usually increased by coughing or sneezing. Physical examination demonstrated positive straight leg raising test, muscle spasm, pelvic tilt and/or loss of the normal vertebral curve. Objective evidence of nerve root abnormality was mandatory for inclusion in this group. Neurological examination revealed one or more of the following: absent or diminished ankle reflex, motor weakness, hypotonia, or atrophy. Abnormal sensory findings were usually present. Several cases of cervical nerve root compression syndrome were added to this group.

GROUP II.—These patients had had previous surgery for herniated intervertebral discs and had recurrence of symptoms.

GROUP III.—Patients in this group had a typical history of back pain and radicular symptoms but did not have objective evidence of nerve root compression.

Forty grams of Ureaphil® were given intravenously to each patient over a period of 30-60 minutes. This dose was repeated at intervals if required but no patient received more than four doses during the study. No patient received more than 40 grams in one day. There were no complications from the use of urea. When the patient became a study case no other conservative treatment was given except as noted in Table 1. In some cases dextrose and water was given to study the psychological effect of receiving intravenous medication for pain. However, no effect was noted after this placebo. The patients were encouraged to ambulate and did so except when pain prohibited. Evaluation of the response to urea was measured by the straight leg raising test, ability to ambulate, request for medication, and subjective responses. When patients failed to respond to urea they were then treated "conservatively" or surgically as necessary. Acute symptoms of less than five days were not evaluated in this study.

Discussion

To attempt to demonstrate the effect of urea on the nerve root itself, myelograms were performed while the patients were receiving urea and serial delayed films were made. Measurable differences were not noted in the anatomy of the nerve roots or the subarachnoid space. Probably the most effective method of demonstrating nerve root changes would be at surgery; however, it is

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Table 1. — Results of the Use of Intravenous Urea in Patients with Herniated Intervertebral Disc Syndrome

Case History	SLR Test			Remarks
	Before Urea	After Urea 4 hr.	After Urea 24 hr.	
GROUP I				
1. Moderate to severe pain for 3 months unrelieved by conservative treatment.	10°	50°	Full	Pain free for 2 days, then pain returned. Patient had excellent palliation. Repeat urea effective but for shorter duration. Patient finally had to have surgery.
2. Severe pain 5 days, intractable unrelieved by absolute bedrest, narcotics, etc.	10°	60°	Full	Almost identical to Case 1.
3. Eight days severe pain, 3 weeks moderate pain unrelieved by absolute bedrest.	20°	Full	Full	Excellent palliation lasted 3 days but pain returned and repeated urea effect was of shorter duration. Finally had surgery.
4. Three weeks severe pain unrelieved by bedrest.	20°	20°	20°	No change.
5. Seven days severe pain unrelieved by bedrest.	10°	40°	Full	Dramatic relief of pain in 2 hours. Discharged pain free.
6. Three months moderate pain.	30°	Full	Full	Excellent results. Discharged pain free. Returned again with similar response.
7. Ten days moderate pain.	20°	40°	Full	Leg pain gone but back pain remaining at time of discharge.
8. Two months severe pain, 6 weeks absolute bedrest, etc., but without relief.	20°	40°	Full	This was most dramatic case in series. Patient was pain free in 24 hours. Ankle reflex returned in 5 days.
9. Same history as Case 8.	20°	50°	20°	Good response but a short duration. 18 hours effect of each dose but later pain returned and the patient had to have surgery.
10. Severe pain for 6 weeks. Absolute bedrest with no relief.	10°	10°	10°	Pain became worse with urea. Myelogram revealed almost complete block of an extruded disc. Patient had surgery with relief.
11. Two months moderate pain.	20°	40°	20°	Very good palliation for 20 hours but pain returned. Leg pain was relieved but back pain remained. Patient responded to additional conservative treatment.
12. Two months severe pain, unrelieved by bedrest. Partial foot drop.	30°	Full	Full	Patient was pain free for 2 days but pain returned to lesser degree. Urea was less effective each dose given. A diagnosis of metastatic carcinoma in the lumbar region was made.
13. Seven months pain along the nerve root C-7 distribution, unrelieved by conservative treatment.				Patient improved with urea, was free from pain with additional conservative treatment later.
14. Five weeks severe pain over C-7, unrelieved by traction.				Patient had classical C-7 syndrome with corresponding findings. Urea gave immediate relief of pain for as long as 24 hours. In 74 hours each dose was effective but of shorter duration each time. At surgery a soft protruded intervertebral disc was removed.
15. Eight months moderate pain as above. Failed to respond to conservative treatment.				Patient's response was similar to #14 but the pain was not so severe. This patient responded well to urea.
16. Seven months pain along C-7, unrelieved by conservative treatment.				Improved with urea and was pain free with additional conservative treatment later.

GROUP II				
17. Pain remained after surgery 9 months.	30°	30°	30°	No change with urea. Had surgery.
18. Pain 7 months with herniated intervertebral disc removed 13 months previously. Had recurrence of pain and a complete block to myelography.	30°	60°	40°	Some improvement of short duration but not impressive.
19. Sudden recurrence of pain 3 weeks after surgery.	10°	40°	10°	Excellent palliation for only about 8 hours after each dose. At surgery an extruded intervertebral disc was removed.
20. Chronic pain for one year after surgery.	30°	30°	30°	No change.
21. Acute symptoms after one month postsurgery.	Full	Full	Full	No change with urea. Responded to bedrest. Discharged pain free after 2 weeks.
22. Postoperative cervical spondylosis with 3 days postoperative radicular pain.				Responded immediately to urea with excellent results. No further pain during postoperative period than expected. At followup patient was well.
GROUP III				
23. Seven years intermittent pain increasing in the past 6 months.	No change with urea.			Myelogram normal.
24. Pain 5 months.	No change with urea.			Refused myelogram.
25. Pain 6 months.	No change with urea.			Refused myelogram.

unfair to the patient to prolong surgery several hours for this purpose. Further investigation in laboratory animals may be of help.

Of the patients who completely recovered after this regimen of treatment, the diagnosis of herniated intervertebral disc appeared clinically justified in five. These "recovered" patients were not submitted to myelography.

Relief of symptoms in this series may be explained by the fact that urea probably reduces the swelling of the nerve root similar to the manner in which it reduces swelling elsewhere in the body. Much has been written concerning urea and its effect on edema and cerebrospinal fluid dynamics.[1-9] Segal and Gardner[10] have had encouraging results with the use of intrathecal injections of steroids. It is believed that steroids as well bring relief through reduction of nerve root swelling.

One patient became worse with the use of urea. His pain became much more intense for several hours after receiving 40 grams of this medication. The myelogram revealed an almost complete block by an extruded intervertebral disc. Urea may have caused increased traction on the nerve root.

By changing cerebrospinal fluid dynamics, urea appears to be an efficacious and safe means of reducing radicular symptoms in a significant number of patients with nerve root compression (Group 1). Urea was, on occasions, an effective means of treatment after the failure of standard conservative measures.

Summary

Twenty-five patients with nerve root compression symptoms were treated with intravenous urea. No other conservative treatment was offered. Urea was helpful in reducing radicular symptoms in 56%; 20% recovered completely. When patients with classical symptoms only were evaluated, 76% had a good response to urea.

Urea was not helpful in the patient with recurrent symptoms or patients who were atypical.

References

1. Tanner, T. H.: On the Employment of Urea as a Diuretic, Med. Times and Gaz., London, N.S., IV, 464, 1852.
2. Freidrich, W.: Mag. Orv. Arch., 1:400, 1892.
3. Crawford J. H. and McIntosh, J. F.: Use of Urea as Diuretic in Advanced Heart Failure, Arch. Int. Med., 36:530-541 (Oct.) 1925.
4. Papp, C. and Shirley Smith, K.: Urea, the Forgotten Diuretic, Brit. M. J., No. 5050:906, 1957.
5. Fremont-Smith, F. and Forbes, H. S.: Intra-Ocular and Intracranial Pressure; Experimental Study, Arch. Neurol. & Psychiat., 18:550-564 (Oct.) 1927.
6. Wolff, H. G. and Forbes, H. S.: Cerebral Circulation; Action of Hypertonic Solutions, Arch. Neurol. & Psychiat., 20:73-83 (July) 1928.
7. Smythe, L.; Smythe, G., and Settlage, P.: Effect of Intravenous Urea on Cerebrospinal Fluid Pressure in Monkeys, J. Neuropath. & Exper. Neurol. 9:438-442 (Oct.) 1950.
8. Javid, M. and Settlage, P.: Effect of Urea on Cerebrospinal Fluid Pressure in Human Subjects, J.A.M.A., 160:943-949 (Mar. 17) 1956.
9. Settlage, P. and Javid, M.: Urea for Management of Intracranial Pressure, Excerpta Medica, Sixth International Congress of Neurology, Brussels, (July 21-28) 1957, p. 107.
10. Segal, A. D. and Gardner, W. J.: Subarachnoid Injection With Caticosteroids in Management of Sciatica, J. Indian Medicine Ass'n. 30:291-293 (Sept.) 1962.

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Uterine Perforation with an Intrauterine Device

Case Report and Review of Literature

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The intrauterine device (I.U.D.) has many advantages as a contraceptive agent. These include minimal expense, non-participation by the user, separation of contraception from the sexual act and reversibility. The complications of this form of contraception have included expulsion, vaginal discharge and bleeding, infections, and pregnancy.[1-5] In many early reports the complication of perforation of the uterus was conspicuous by its absence.[6-9] Indeed, in a recent report by one of the authors (H.D.), no perforations were discovered in 3,800 patients using a new type I.U.D.[10] More recently reports of uterine perforations, occasionally with grave sequelae, have appeared.[11-29]

The purpose of this paper is to present a case of uterine perforation by a new type I.U.D.* and to review briefly the clinical circumstances, possible sequelae, and management of this complication.

Case Report

The patient was a 25-year-old Caucasian female, G 5, Para 4 0 1 4, in whom the I.U.D. was inserted on 1/23/67 at eight weeks postpartum following a normal pregnancy and spontaneous delivery. It was inserted without difficulty during a menstrual period. Five months later, she was seen in the clinic where the presence of the coil was confirmed by visualizing the strings in the cervix.

Another examination on 3/25/68 revealed the absence of these strings and an enlarged softened uterus. The patient was told that she was pregnant. She was next seen on 4/4/68 in the emergency room of Jackson Memorial Hospital complaining of lower abdominal pain, fever, chills, and vaginal bleeding. The uterus was enlarged to six weeks gestational size. The cervix was dilated and the products of conception were in the os. She was admitted into the hospital with the diagnosis of an infected incomplete abortion. An x-ray film of the abdomen showed the I.U.D. to be out of the pelvis (Fig. 1). After antibiotic and oxytocin therapy, a D&C was performed without event. Because of the infection, the patient was discharged to return for removal of the I.U.D. at a later date.

The patient was re-admitted on 6/5/68 and a laparotomy was performed. The I.U.D. was found superficially embedded in the omentum (Fig. 2), and it was removed without difficulty. No gross uterine perforation site was visible. Because the patient had requested and had been approved for sterilization, and because it was desired to extensively investigate the uterus for a perforation track, an abdominal hysterectomy was performed. A detailed pathologic examination did not reveal a perforation site. The patient had an uneventful postoperative recovery, with the exception of a low grade fever on the fourth day. She was discharged on the eighth postoperative day.

There was an eosinophilia on three consecutive analyses of the peripheral smear while the I.U.D. was in the peritoneal cavity. The eosinophils constituted 10%, 19%, and 29% of a total leukocyte count ranging from 9.8 to 12 thousand mm^3. The eosinophil counts were within normal range on previous and subsequent examinations. It is generally believed that the I.U.D.'s are inert, both in terms of tissue reaction and immunologic response. The appearance of eosinophilia while the device was in the peritoneal cavity and its absence before and after removal suggest the possibility of an allergic response.

Discussion

Numerous complications have accompanied use of the I.U.D. Reports of uterine perforation following the insertion of the Graefenberg Ring undoubtedly contributed to its abandonment.[1,23,24] The etiology of perforation has been



Fig. 1. — The extrauterine abdominal I.U.D. can be seen at the end of the arrow.

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*Saf-T-Coil 33S, manufactured by Deseret Pharmaceutical Co., Salt Lake City, Utah.

related to the method of insertion of the I.U.D., time of insertion, and the type used. Tietze has commented that most of these perforations occurred during "ring" insertion or from vigorous attempts at removal.[1] With the introduction of newer I.U.D. designs and materials, many of these drawbacks have been circumvented and perforations are now uncommon.

In a recent extensive review, 43 perforations were noted in 22,403 insertions.[1] Perforations occurred most commonly with the Birnberg Bow.[1] There is only one previous report of a uterine perforation with the Saf-T-Coil.[30] It is generally agreed that perforations occur most often during insertion. The relatively high incidence with the bow type is thought to be related to the rigidity of the inserter and the necessity for cervical dilatation prior to its insertion. There is little evidence to implicate erosion through the uterine wall or enhanced uterine activity in the etiology. Endometrial histologic changes have been minimal,[31] and apparently myometrial activity is stimulated for only a few days after insertion.[32]

Rarely, uterine perforation may occur long after insertion of the I.U.D. Three cases have been reported of premature labor, rapid delivery and maternal death from amniotic fluid embolism during the second trimester where conception has occurred with the device in situ.[3,33] In each case a laceration of the uterus and a rent in the uterine vessels were found at postmortem. It is theorized that uterine contractions of labor expelled the I.U.D. through the uterine wall.

The incidence of perforation is related to the interval between delivery and insertion of the I.U.D. Tietze found a perforation rate of 3.4/100 insertions at five weeks postpartum compared to 0.2/100 three months postpartum.[1] The general trend, therefore, has been toward insertion at later times postpartum; thus allowing complete involution of the uterus. Pre-insertion contraception becomes necessary with such delays.

The majority of perforations are asymptomatic.[1-15] An occasional serious sequelae does result such as bowel obstruction, sepsis, or death.[3,4] Bowel resection is frequently necessary.[17,25] Bowel obstruction is more common with the closed type device, such as the bow or ring. Esposito notes that this is even more likely if the device has partially perforated the uterus and is anchored by the myometrium.[15]

The prevention of uterine perforations begins with the original insertion. Scrupulous attention to proper patient selection, time of insertion, type of I.U.D., and method of insertion can minimize this complication. These guidelines have already been enumerated.[10,15,16] Continued experimentation with new materials and forms will further reduce the incidence of this complication. Recognition of uterine perforation during the insertion procedure should contraindicate temporarily the use of the I.U.D.

The detection of proper I.U.D. placement is difficult. Partially reliable indicators have been devised such as pelvic x-ray plates, Beolocator, I.U.D. strings, and magnetic detectors.[29,34] Confirmation can be done with hysterograms, but this seems impractical as a routine screening procedure.[35-37] A suspicion of uterine perforation must always exist. If during routine examination, the device cannot be located either by the tell-tale strings, or by sounding the uterus, unnoted expulsion should not be presumed. An abdominal x-ray should be done to confirm the absence. If the I.U.D. is shown by x-ray, then in the absence of pregnancy the position is ascertained by a series of x-rays with a metal uterine probe in place.

Once a perforation is recognized, elective surgical removal is indicated. Although an occasional



Fig. 2. — The I.U.D. can be seen embedded in the omentum at the time of laparotomy.

device may be removed through the cul-de-sac, abdominal laparotomy is usually necessary. When pregnancy is also present any surgery is probably best postponed until postpartum.

Summary

Intrauterine devices have a number of theoretical advantages and are increasing in popularity. Their side effects include infection, bleeding, expulsion, pregnancy and uterine perforation.

The second case of uterine perforation with a Saf-T-Coil is presented. This is the only known perforation among 3,800 users of this device in Dade County. The clinical setting, the possible sequelae and management of perforations is briefly reviewed.

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References

1. Tietze, C.: Contraception With Intrauterine Devices, 1959-1966, Am. J. Obst. & Gynec. 96:1043-1054 (Dec.) 1966.
2. Piver, M. S., and Decker, J. P.: Intrauterine Contraception Device and Ovarian Thecoma, J.A.M.A. 197:511-513 (Aug.) 1966.
3. Scott, R. B.: Critical Illnesses and Deaths Associated With Intrauterine Devices, Obst. & Gynec. 31:322-327 (March) 1968.
4. Ledger, W. J., and Schrader, F. J.: Death From Septicemia Following Insertion of an Intrauterine Device, Obst. & Gynec. 31:845-848 (June) 1968.
5. Wilson, J. R., and Ledger, W. J.: Complications Associated With the Use of Intrauterine Contraceptive Devices in Women of Middle and Upper Socioeconomic Class, Am. J. Obst. & Gynec. 100:649-661 (March) 1968.
6. Hall, H. H.; Stone, M. L.; Sedlis, A., and Chabon, I.: The Intrauterine Ring for Conception Control, Fert. & Steril. 15:618-624 (Nov.-Dec.) 1964.
7. Birnberg, C. H., and Burnhill, M. S.: A New Intrauterine Contraceptive Device, Am. J. Obst. & Gynec. 89:137-138 (May) 1964.
8. Lippes, J.: Contraception With Intrauterine Plastic Loops, Am. J. Obst. & Gynec. 93:1024-1030 (Dec.) 1965.
9. Margulies, L. C.: Intrauterine Contraception a New Approach, Obst. & Gynec. 24:515-520 (Oct.) 1964.
10. Vaughn, B. J., and Dominguez, H.: The Double Coil in Dade County. Presented at the Sixth Annual Meeting of the Am. Assoc. Planned Parenthood Physicians, San Antonio. April 16-17, 1968.
11. Burnhill, M. S., and Birnberg, C. H.: Uterine Perforation With Intrauterine Contraceptive Devices, Am. J. Obst. & Gynec. 98:135-140 (May) 1967.
12. Burnhill, M. S., and Birnberg, C. H.: Contraception With an Intrauterine Bow Inserted Immediately Postpartum, Obst. & Gynec. 28:329-331 (Sept.) 1966.
13. Seward, P. J.; Burns, G. T., and Quattlebaum, E. G.: Intrauterine Contraceptives—An Unusual Complication. J.A.M.A. 194:1385, (Dec.) 1965.
14. de Villiers, E.H.G., and Rosenstein, P. F.: Intestinal Obstruction Following Perforation of the Uterus With an Intrauterine Contraceptive Device, Am. J. Obst. & Gynec. 96:592-593 (Oct.) 1966.
15. Esposito J. M.: Perforation of the Uterus Secondary to Insertion of an I.U.C.D., Obst. & Gynec. 28:799-805 (Dec.) 1966.
16. Ledger, W. J., and Wilson, J. R.: Intrauterine Contraceptive Devices: The Recognition and Management of Uterine Perforation. Obst. & Gynec. 28:806-811 (Dec.) 1966.
17. Price, C. W. R.: An Unusual Cause of Intestinal Obstruction, Med. J. Australia 1:106-107 (Jan.) 1955.
18. Early, C. M. Jr.: Small Bowel Obstruction Due to a Birnberg Bow, Am. J. Surg. 113:418-419 (Mar.) 1967.
19. Goodhue, P. A., and Ridgway, W. S.: Uterine Perforation by the Intrauterine Contraceptive Device, Conn. Med. 31:561-563, (Aug.) 1967.
20. Nakamoto, M., and Buchman, M. I.: Complications of Intrauterine Contraceptive Devices: Report of 5 Cases of Ectopic Placement of the Bow, Am. J. Obst. & Gynec. 94:1073-1078 (Apr.) 1966.
21. MacFarlan, S. M.: Perforation of the Postpartum Uterus With an Intrauterine Contraceptive Device, Am. J. Obst. & Gynec. 94:283 (Jan.) 1966.
22. Clarke, J. P.: Uterine Perforation With the Lippes Loop, Am. J. Obst. & Gynec. 94:285-286 (Jan.) 1966.
23. Andrews, C. J.: Migrating Graefenberg Contraception Ring, J.A.M.A. 107:279 (July) 1936.
24. Rutherford, A. M.: The Graefenberg Ring, New Zealand M. J. 60:413-415 (Sept.) 1961.
25. Thambu, J.: Complication Following Insertion of Intrauterine Contraceptive Device, Brit. M. J. 2:407-408 (Aug.) 1965.
26. Waghmarae, D.: Uterine Perforation With I.U.C.D. During Puerperium, Brit. M. J. 1:376-377 (May) 1967.
27. Cooke B. J E.: Accidential Perforation of the Uterus With an Intrauterine Contraceptive Device, Brit. M. J. 1:1236 (May) 1966.
28. Rummel, H.: Uterus Perforation duch Einlage Eines Intrauterin Pessars (Margulies-spirale). Geburtsh. U. Frauenheilk. 27:33-36 (Jan.) 1967.
29. Cornett, J. W. D., and Mac Fadyen, D. L.: Canadian Experience With the Margulies Spiral, Fert. & Steril. 18:198-206 (Mar.-Apr.) 1967.
30. Seymour, R. J.: Preliminary Experience With the Saf-T-Coil. Am. J. Obst. & Gynec. 98:1150-1151 (Aug.) 1967.
31. Hall, H. H.; Sedlis, A.; Chabon, I., and Stone, M. L.: Effect of Intrauterine Stainless Steel Ring on Endometrial Structure and Function, Am. J. Obst. & Gynec. 93:1031-1041 (Dec.) 1965.
32. Behrman, S. J., and Burchfield, W.: The Intrauterine Contraceptive Device and Myometrial Activity, Am. J. Obst. & Gynec. 100:194-202 (Jan.) 1968.
33. Mack, H.: Editorial Comment. Obst. & Gynec. Survey 22:234, (Mar.-Apr.) 1967.
34. Fuchs, F. F.; Buchman, M. I., and Nakamoto, M.: A New Instrument for Localization of Intrauterine Contraceptive Devices. The Beolocator. Am. J. Obst. & Gynec. 93:128-130 (Sept.) 1965.
35. Burnhill, M. S., and Birnberg, C. H.: The Size and Shape of the Uterine Cavity Determined by Hysterography With an Intrauterine Contraceptive Device as a Marker, Int. J Fertil. 11:187-193 (Apr.-June) 1966.
36. Friedman, P. J., and Pine, H. L.: Radiographic Localization of the Ectopic Intrauterine Contraceptive Device, Obst. & Gynec. 27:814-819 (June) 1966.
37. Mazher, K.; Kamal, I.; Hefnawi, F.; Talaat, M.; Younis, N., and Tagi, A. E.: A Simple Technic of Hysterography for Evaluating Side Effects and Mode of Action of Intrauterine Devices—A Study of 100 Cases, Fertil. & Steril. 18:353-366 (May-June) 1967.

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Unilateral Tubal Twin Pregnancy
Report of Case

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Unilateral tubal twin pregnancies are extremely rare; most are monozygotic. The first case was reported in 1891[1] and 87 cases appeared in the literature up to 1967.[2] Dizygotic unilateral tubal twin pregnancies occur less often; only three cases had been reported prior to 1961.[3-5] Bobrow and Schreiber added the fourth case, one in which the second fetus was detected among blood clots.[6] Four cases of unilateral tubal triplet pregnancies have been reported[7-10] and one case of unilateral tubal quintuplet pregnancy.[6]

It is difficult to estimate the incidence of unilateral tubal twin pregnancies precisely. All cases are not reported. There may be twins among tubal abortions, which resolve spontaneously, possibly lost among blood clots in the abdominal cavity.

There are no significant differences between the unilateral single or twin pregnancy in the clinical picture and maternal prognosis. It is suggested that all intraperitoneal blood clots should be a part of the pathology specimen.

Report of Case

The patient, a 23-year-old Negro, gravida I, para I, aborta I, was admitted to the hospital on Jan. 5, 1968 with the chief complaint of vaginal bleeding and pain in the lower abdomen. Scanty bleeding had begun during the first week of December and had continued over the following three to four weeks. It had become associated with pain in the abdomen and a sensation of dizziness within the three to four days prior to admission to the hospital. She had had some mild nausea and vomiting during the early part of the illness. The last normal menstrual period occurred the middle of November.

The past history revealed no serious illnesses or abnormality in menstrual periods. Review of symptoms proved entirely negative except for the present illness.

Physical examination revealed a well nourished, well developed, somewhat obese female in no acute distress. The blood pressure was 120/80, pulse rate 85 and regular, and temperature within normal range. The cardiovascular and respiratory systems appeared normal. The abdomen was somewhat protuberant with generalized tenderness particularly over both lower quadrants but without localization and spasm or rebound tenderness. No masses could be detected by palpation.

Examination of the pelvic region revealed a slightly bloody ooze from the cervical os which was closed. There was excitatory pain. The uterus appeared approximately twice normal size and was quite tender. The adnexal structures were not felt. Culdocentesis revealed free, unclotted blood.

On the basis of initial findings and while confirmatory procedures were being continued, she was treated for pelvic inflammatory disease. Ectopic pregnancy was suspected.

The results of laboratory examination were: red blood cell count 2.8 million per cubic millimeter; hemoglobin level 6.9 Gm.%; hematocrit 27%; white blood cell count 8 200 per cubic millimeter; segmented neutrophiles 74%; eosinophiles 3%, and lymphocytes 23%. Urinalyses proved negative and U.C.G. (urinary chorionic gonadotropic) positive. Sickle cell preparation gave negative results.

After two units of blood had been given, an exploratory laparotomy was performed. There was approximately 300 cc. to 400 cc. of unclotted blood in the peritoneal cavity, and a pregnancy was found occupying the midportion of the left tube. Particles of apparent placenta had been aborted through the fimbria of the tube and implanted on the posterior surface of the uterus, posterior cul-de-sac and sigmoid colon. A left salpingectomy was performed without complications.

Pathologic examination revealed a sac-like structure 11 mm. maximum dimension enclosing an embryonic-appearing structure 9 mm. maximum diameter on cut section near the center of the specimen. Proximal to this structure was another cystic cavity measuring 2 cm. in diameter which enclosed a second degenerative appearing embryonic structure 9 mm. in diameter. The sacs were completely separate from each other but were the same gestational age. Microscopic sections confirmed the gross impression.

The final diagnosis was dizygotic tubal twin pregnancy.

The postoperative course was uneventful and the patient was discharged in good condition on January 12.

Summary

A case of dizygotic unilateral tubal twin pregnancy is reported, adding the fifth case to the literature which is reviewed briefly.

References

1. DeOtt, D.: Am. de Gynec. et D'obst., Paris, 36:304, 1891.
2. Sylvester, K.: Unilateral Tubal Twin Pregnancy, Postgrad. Med. 43:102-2, 1967.
3. Demick, P. E. and Cavanagh, D.: Unilateral Tubal Twin Pregnancy, Am. J. Obst. & Gynec. 76:533, 1958.
4. Haukohl, R. S. and Anderson, W.A.D.: Dichorial Unilateral Tubal Pregnancy, Am. J. Obst. & Gynec. 53:338, 1947.
5. Trolle, D.: Double Ectopic Pregnancy in One Tube, Acta Obst. et Gynec. Scandinav. 27:395, 1948.
6. Bobrow, M. L. and Schreiber, I.: Unilateral Twin Tubal Pregnancy, Am. J. Obst. & Gynec. 81:1230-1232 (June) 1961.
7. Diamant, Z.: Ein Fall Von Drillingsschwangerschaft in Demselben Eileiter, Zentralbl Gynak. 38:128. 1914.
8. Krusen, W.: Triple Ectopic Gestation, Am. Med 3:18, 1902.
9. Plyler, C. O.; Freeman, W. H.. and Johnson. J. J. Jr.: Unilateral Triplet Tubal Pregnancy, N. Carolina M. J. 17:170. 1956.
10. Vine. L. E.: Ectopic Triplets, Case Journal of Malaya, Branch British M. A. 5:56 (June) 1941.

Dr. Sanchez, 810 Margaret Street, Jacksonville 32204.

pH Measurements of the Vagina and Cervix During Pregnancy

Frank S. Billingsley, M.D.

The pH measurements of the secretions of the vagina and the cervix have been ascertained in their relationship to fertility, infection, effect of douching, and the menstrual cycle.[1-3] Nevertheless, there are no reported studies conducted during pregnancy. Although the pH index of the vagina has been found to be within the acid range and that of the cervix slightly alkaline, normal pH values have not been determined during pregnancy.

This pilot study was undertaken to determine whether or not accurate pH measurements of the vagina and cervix would be feasible during all stages of gestation and whether, after evaluating the meter readings, interpretation of these measurements would be a meaningful diagnostic aid.

Materials and Method

The pH of both vaginal and cervical solutions were measured in 45 pregnant women with duration of gestation ranging from 16 weeks to 41 weeks. Direct pH measurements were made with the Beckman combination electrode utilizing an expanded scale pH meter.* The glass electrode was inserted through the cervical os for 1 cm. to 1.5 cm. for readings of the cervix and within the posterior vaginal fornix for readings of the vagina. The pH unit measurements, read from the scale of the meter, are accurate to 0.1 pH. Before each series of measurements, the meter was standardized against a buffer solution at pH 7.4 at 37 C. The glass electrode was cleansed thoroughly and soaked in distilled water before each use.

Dr. Billingsley is a commander in the U.S. Navy Medical Corps.

*Beckman Instruments, Inc., Fullerton, Calif.

The opinions or assertions contained herein are those of the author and are not to be construed as official or as necessarily reflecting the view of the medical department of the United States Navy or of the Naval service at large.

Results

The pH measurements of the vagina, below 35 weeks' gestation, ranged from 3.8 to 4.7, averaging 4.16. Above 35 weeks, the range was 3.9 to 4.8, averaging 4.25. In trichomonal or monilial vaginitis the range was 4.4 to 5.9, averaging 4.9. The vaginal pH of two women with ruptured membranes was 6.9 and 7.0 respectively, averaging 6.8.

The pH measurements of the cervix, below 35 weeks' gestation, ranged from 6.8 to 7.5, averaging 7.26. Above 35 weeks, the range was 6.7 to 7.6, averaging 7.19. In trichomonal or monilial vaginitis the range was 6.7 to 7.8, averaging 7.44. (Fig. 1).

The age of the patients ranged from 16 to 37, and the parity ranged from 0 to 6. No correlation of the ranges of pH measurements could be made with the parity or age.

Discussion

The pH measurement of vaginal secretions during pregnancy is definitely acid and of the cervix alkaline. No correlation of the ranges of pH measurements could be made with the period of gestation.

Vaginitis, both trichomonal and monilial, tends to decrease the acidity of the vagina. Maintaining or increasing an acid vaginal environment, as proposed by Karnaky,[4] may decrease the incidence of vaginitis.

The range of pH measurements of the amniotic fluid as previously determined[5] and by the Beckman pH meter was 7.0 to 7.2. In view of the definite acidity of the vagina, the change in pH from ruptured membranes can easily be determined after simply inserting Nitrazine or litmus paper within the vagina.

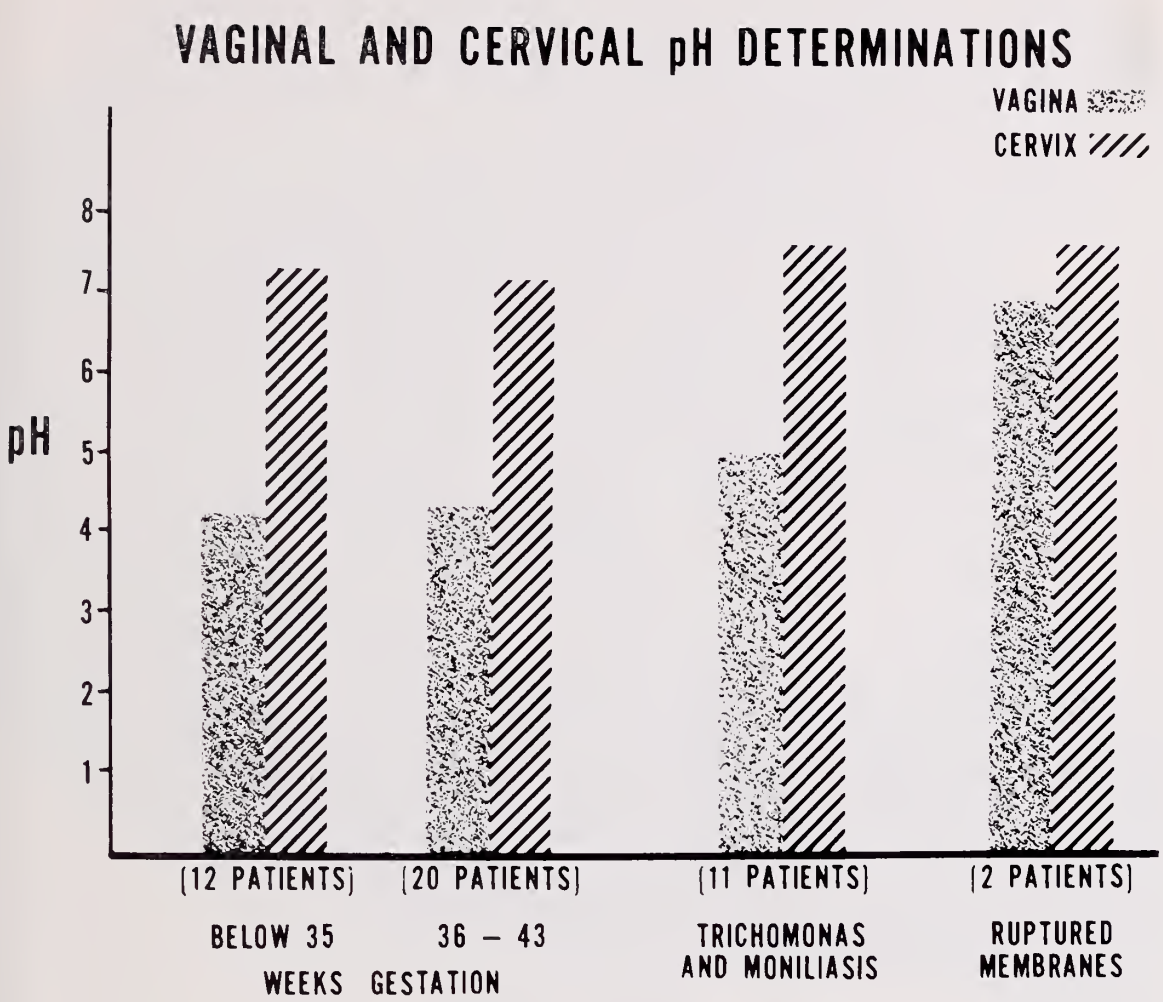


Fig. 1.—Average vaginal and cervical pH determinations.

Summary

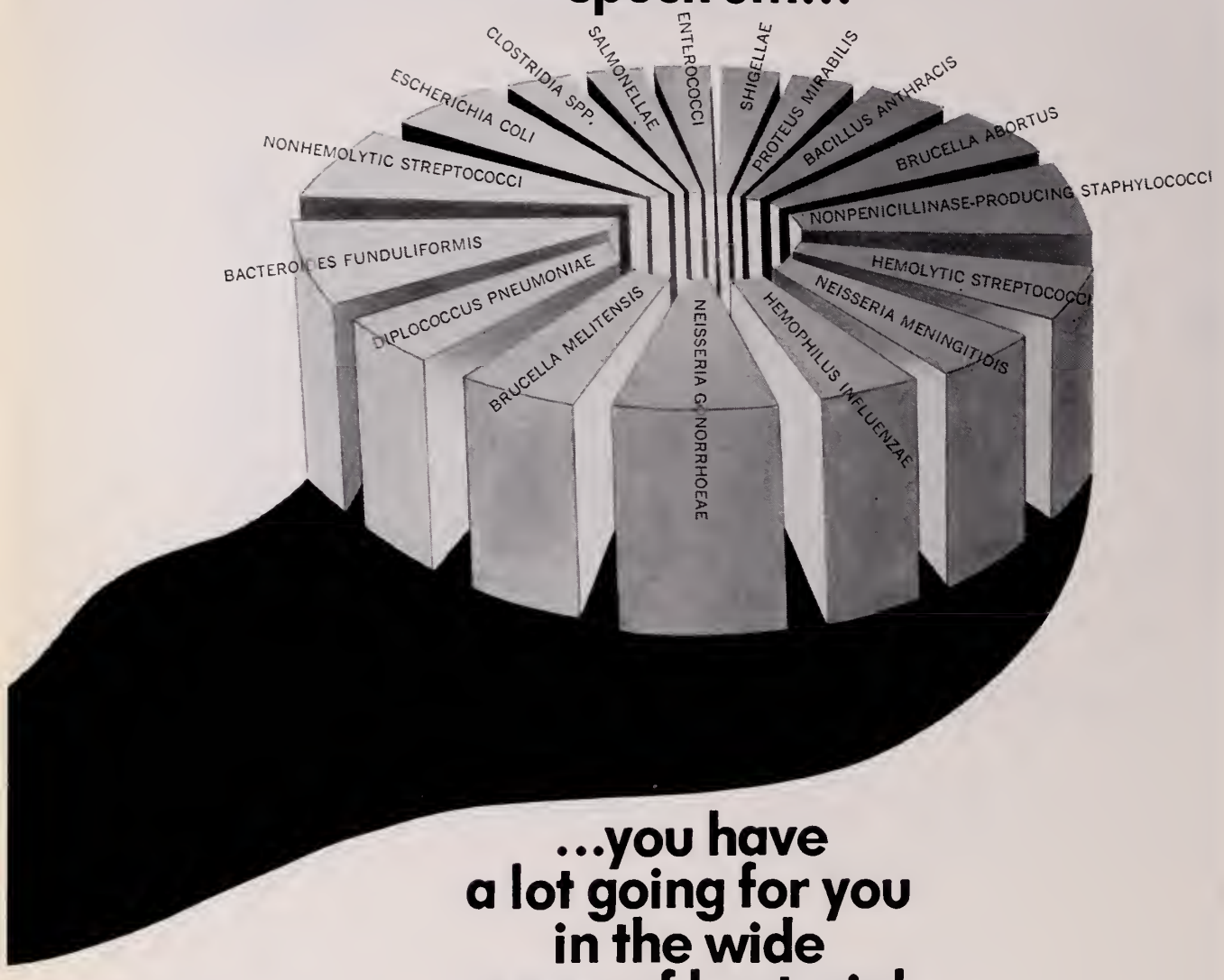
The pH measurements of the vagina and cervix in 45 pregnant patients were obtained from the scale of a Beckman pH meter. The average pH index of the vagina in those without vaginitis was 4.2 and of the cervix 7.2. In the limited number of patients studied, vaginitis tended to decrease the normal acidity of the vagina and the average pH index was 4.9. Testing the vaginal pH with Nitrazine or litmus paper is a meaningful diagnostic aid in determination of ruptured membranes. The pH measurements of the cervix and the vagina remained relatively constant throughout all stages of gestation. More measurements should be done in order to uphold the validity of the foregoing findings.

References

1. Breckenridge, M.A.B.; Pederson, D.P., and Pommerenke, W. T.: pH Study of Human Cervical Secretions, Fertil. & Steril. 1:427-434 (Sept.) 1950.
2. Glynn, R.: Vaginal pH and the Effect of Douching, Obst. Gynec. 20:369-372 (Sept.) 1962.
3. Mueller, O.: Gebertsh. Gynaek, 155:272, 1960.
4. Karnaky, K. J.: New Low pH Preparation for Treatment of Vaginitis and Cervicitis, Obst. Gynec. 17:472-476 (Apr.) 1961.
5. Bonsnes, R. W.: Clin. Obst. Gynec. 9:440, 1966.

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Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

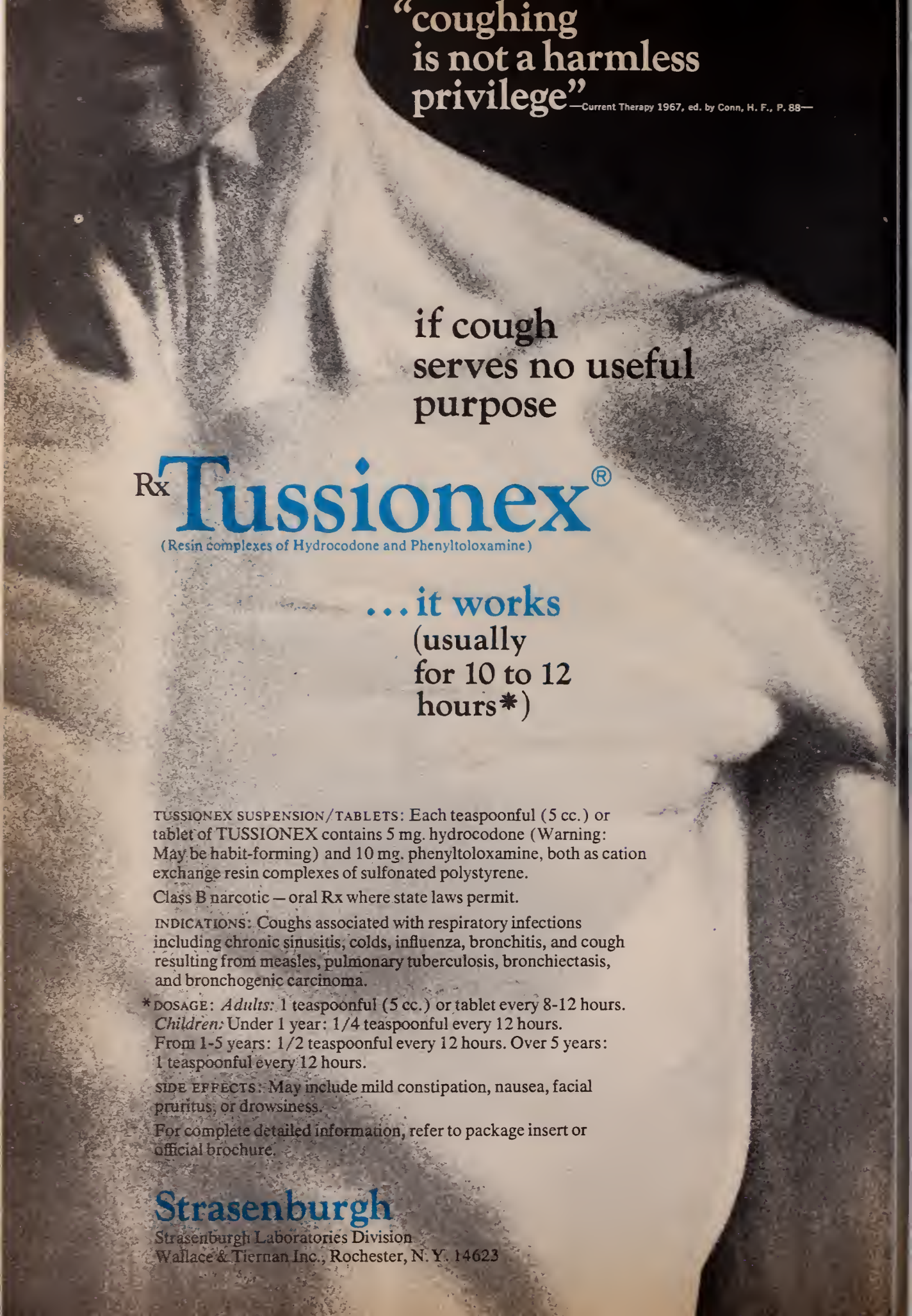
Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see Detailed Product Information.

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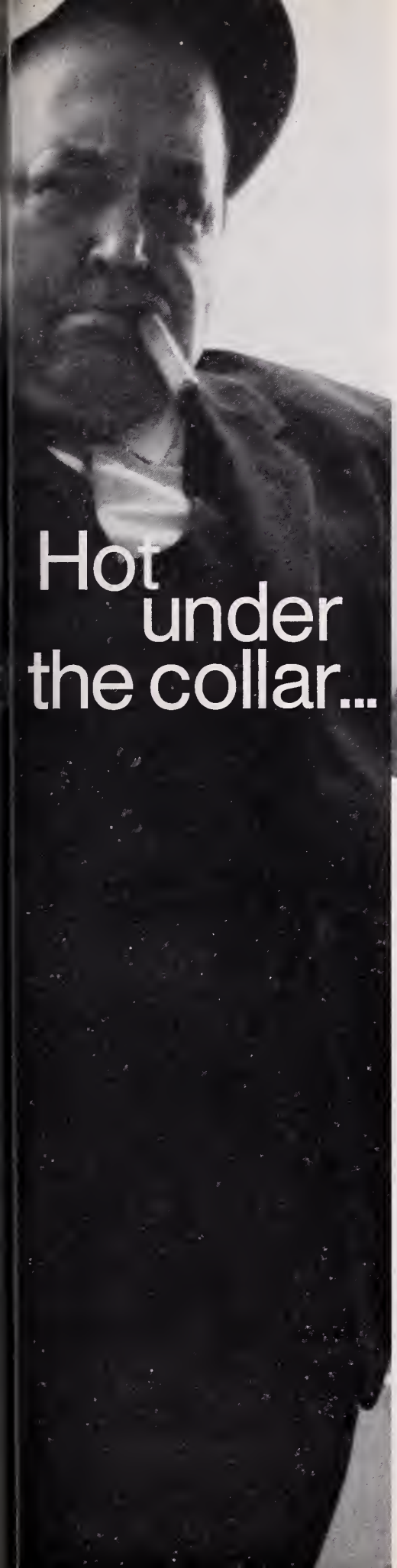
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Use in pregnancy: Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue therapy with this agent two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.
Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Severe salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients.
Adverse Reactions: The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible.
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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

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Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

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Florida Medical editorial

From the Editor

Franz Stewart

Our Cover and the Everglades

The slow-moving water as it travels south and joins the water of Florida Bay lets the land of Florida gradually fade away. Hammocks and low-lying lands gradually give way to smaller and smaller islands and clusters of mangrove clinging to the shallow tidewaters.

Here an individual can visit a land not overcome by the crowds along the coast. One can feel the mystic of aloneness shared by flocks of birds, single feeding herons, fish you can see or deer just beyond the undergrowth. Or further away, tales of heroism and cruelty, of Indians, escaped slaves, plume gathering or bird watching. Claire Drew Thompson brings this to us in our cover picture showing the Big Cypress, and the stillness which surrounds you there.

Thanks to Dr. Cleveland and all the Others

The Orlando meeting last January still sticks in my mind. This was the Eleventh Annual Conference of County Medical Society Presidents and Secretaries. It was much more.

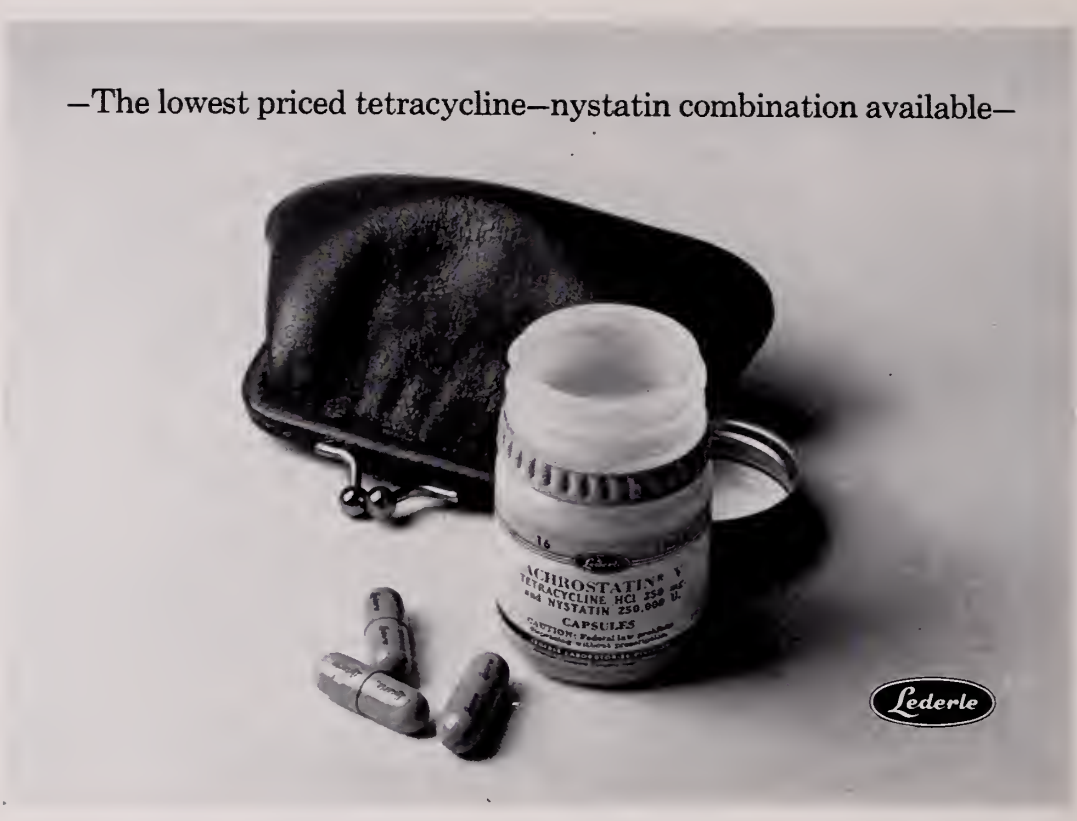
Here at close hand, in our own discussion group, came leaders of national and state government agencies which share with us the distribution of medical care, the problems of fitting medicine and its needs to the requirements of political responsibility and control. This brought consideration down to the immediate questions as to how the American people in the complex of our society will have medical care and how the costs will be met. Somehow there seemed to be a challenge. How would you solve the problems?

New overlaps of law and medicine and insurance and medicine were discussed in an atmosphere of realistic consideration and search for answers. If, for example, professional liability insurance costs become prohibitive, if anxious physicians add hospital days or expensive tests for needed protection against liability rather than simply for wise patient care, who meets the costs? This must be balanced against rightful protection from poor medicine. If Medicare pays for procedures, for things done to a patient, and not for hours of wise counsel, or considered interviews, how will this help medical excellence?

In the Workshop on Medicine and Religion there were several areas of discussion. Who can best aid in one facet of care by appraising stresses and bringing understanding to patient and family? Can the clergy help? When does an individual's life begin? Is this before conception, at conception, some later period of development, at birth, and how can this be decided? The same relates to death. What criteria can be used to measure occurrence of death? These are practical questions today.

There is another thing that makes the Orlando meeting important. Here were busy doctors from all over the state who had left their work to do a job for you and me. These efforts give a forum, a common meeting ground for discussion between government and physicians, and includes a voice from the many attitudes within the profession of medicine. It is so easy to let others do this, but stop for a moment, realize the tasks assumed by our fellows and cast a grateful eye to those who are concerned and who do contribute this work. Unless the constructive ideas needed for good medicine have a voice, then the changing environment in which we work will not be nurtured to produce good doctors, good medicine, and good medical care.

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Florida Medical | feature

Dyslexia: Some Thoughts of an Interested Physician

O. M. Reinmuth, M.D.

Last night I watched the dramatic advent of thought to the mind of an impossibly deprived child—without sight, without hearing, without communication. It was, of course, the story of Helen Keller. While in the process of being involved in the excitement of this tableau I found myself recalling the words of a respected colleague, in a discussion of the problem of dyslexia. He said, "The principal benefit of testing a child for dyslexia is to recognize that dyslexia exists, and thus spare the efforts of lengthy attempts to teach that child to read—the true dyslexic probably cannot learn to read. All other children with poor reading ability," he continued, "will read if they simply try harder."

The analogy I wish to draw is not what at first glance might be assumed. Helen Keller was not dyslexic in the sense that that term is usually used. What is analogous is the assumption that enough is known to assert with authority that we are able to determine easily when not to try. It seems unfortunate that there are any so boldly confident of their knowledge of this curious and hard to define state as to encourage a negative attitude toward any attempt to aid it. It is, I am tempted to believe, this very crystallization of a pessimistic attitude that encourages some of the unreasoning, blindly optimistic therapeutic approaches that are presently a source of controversy.

As a neurologist speaking to an audience that may not have been so closely drawn into this problem as yet, I must clarify a little the nature of the controversy, since it may not be too evident to those who have followed the recent issues of the Journal.[1,2,3,4] First, the term dyslexia, although not satisfactory to many interested professionals, is accepted for our present purpose for several reasons. It is already commonly used, whether we like it or not, and no distinctly superior alternative has been proposed. It is noncommittal as to etiology—and despite many inter esting, even probable suggestions, no clear etiology has been firmly established. It is, or at least has been, relatively devoid of emotionally horrendous implications, such as the term "minimally brain-damaged." Although a rigid definition is not possible, the meaning here intended is that situation in which a child has an unusual difficulty in learning to read and spell, even though by evaluation of experts and by a variety of empiric psychometric test techniques, that child has attributes associated with normal, or even above average, intelligence. Many special situations exist, or could be imagined, that would make this definition inadequate, but to qualify it to meet all these exceptions would not only make it unwieldy, but would limit the usefulness of this rather general term.

A worthwhile understanding of much of what is known about these children from the standpoint of a medical expert is available in a slim volume by MacDonald Critchley,[5] and should be read—not necessarily accepted—by any individual interested in understanding the problem. Many contemporary neurologists in this country and abroad would subscribe to most of the views, and probably to all of the facts, cited in this work. The greatest present day controversy revolves around a systematic regimen of therapy based upon a rather rigid set of hypotheses and advocated by the Doman-Delacato school. Since they espouse an optimistic attitude in a field that too many

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doctors either do not understand, or if they do, care to reject as their responsibility, and since most school systems and all but a few professional educators have been equally remiss in attempting to understand, it is no mystery that frustrated parents have often accepted their promises as an only alternative to no assistance at all for their children. Every doctor giving advice about the management of children with learning problems (not just dyslexics) must examine the reasons of their own professional bodies for rejecting the Doman-Delacato regimen. These reasons have recently been published[6] and hopefully will appear soon in the pages of this journal.

If you have read the articles preceding this in the JOURNAL you will have already been exposed to much of what is known or conjectured about the disorder. You will not have the advantage, however, of enough information to be certain of how much reservation to attach to many of the statements made. There is an overwhelming amount of literature available on this subject, but the preponderance is in materials not readily available in most medical libraries. There are several recent small books that are informative[7,8,9] and like the articles in this JOURNAL, they are reflective of the areas not only of ignorance, but of failure to relate phenomena seen by the psychologist, the educator, the pediatrician, the psychiatrist, the neurologist, and in special instances, a host of other medical and para-medical specialists. Rather than to attempt to initiate you to all ramifications of the problem (I am not certain my own understanding is competent to do so) I would prefer to share some impressions and suggestions, some of a more practical nature in rendering advice to parents, that have seemed reasonable to me.

The opinions I have formed as rough guiding principles are not designed to keep me popular with experts in the field. Indeed there is no opinion possible without a firm and authoritative contrary voice in some field. Using these empiric principles, however, has seemed to result in benefit to a large number of children, most of whom would have floundered without some guidance.

First a word is in order about the psychological, or even psychiatric, aspects of the disorder. Limiting ourselves to a consideration of the cultural, sociological and ethnic groups likely to come under the inspection of a private practitioner of medicine, it is my conviction that there are few things our contemporary children would like to do so much when they enter school as learn to read. If I may be only a little facetious, they would like to know how to tell when their favorite TV program is on without having to ask brother or sister. They want to know what signs say, how to read the comics, how to read and write notes they see their peers and their parents spending so much time with—or don't you remember your 5-year-old? This putatively eager child goes enthusiastically to first grade. He often has an attribute—of which more later—that works against him. He is likely to "pop off" innocently when he is expected to be quiet. He may feel impelled to leave his seat when he shouldn't. This may not set the stage too favorably for a good opinion and a patient attitude from his teacher. Mother and Father often have no apprehension when the first report card comes back, especially since there is a trend to not grading achievement in early or even in later years. The deportment section may have a check mark in 'Self-Control.'

In most school settings, serious efforts at the beginnings of reading begin near the end of that first six weeks. The child who does not do well is rewarded day after day by increasingly impatient frowns from even an understanding teacher. What he memorizes at one session seems to have disappeared the next. Teacher and parent both take this paradoxical performance as a kind of willful negligence—'Come, come, Johnny, you're not trying.' Most five and six-year-olds try manfully, for an uncommonly long time, if a fragment of self-realization of accomplishment is achieved. But the dyslexic child only knows that he has tried to the best of his ability, and since the child's only standard of knowing whether his effort is satisfactory is the approval and the attitudes of those around him, he soon decides from those opinions that he is incompetent. His parents may reassure him about his report card (often they upbraid him instead), but the child knows that most of the other kids can answer teacher's questions and can do what is required of them—with a smile from the teacher—while he must meet always a negative response. The other children do not hesitate to reinforce his hesitant and reluctant guilt: he is dumb.

The concept of dumbness is an easily acquired attitude for the unsophisticated mind, and this example is offered to help to explain (opinion again) several problems. If a child is marginal in his self-concept because of one or both parents being unavailable to him as a source of emotional

reliance—a situation quite common in many homes especially with the demands of profession on the ambitious father, and the demands of home and the variety of social requirements (not at all necessarily frivolous) on mother—then the difference between relative emotional health and psychiatric decompensation may depend entirely on the attitude of those others, schoolmates and teacher, who are the child's only other contact. A child can sometimes tolerate no support from one or the other source, but small support from one, and a threatening or negative attitude from the other, tilt the balance. Many such children, needing some sign that they are attended to and are important, will, by trial and error, accept the best sign they can achieve of being commanding individuals—if they cannot be the cops, they'll be the robbers. Misbehavior then may be the only avenue through which they can achieve the attention of their schoolmates, their teacher, and even their parents. Since the attention they get is usually punitive, it is surprising to most of us that they persist.

Isn't it strange that we accept the fact that monkeys raised with unreasonable and random punishment, but punishment with personal contact, grow up to act better in their environment than monkeys with no punishment, but no contact with either human or monkey, but we cannot understand why pathological behavior may be a better solution for the intellectually frustrated, than acceptance of the role of the dumbbell? This commentary is to encourage the belief that psychological disturbance (behavior disorder) is likely to be a sign of inability to find success in the first school relationships, and that it will be most blatant, but not uniquely restricted to, those children whose home is least supportive. If this is true, it follows that successful control of the frequent behavioral abnormalities in dyslexic children should direct first to the learning problem, secondarily to the psychological. Both may have to be worked with, but the suggestion is that psychiatric help without overcoming the deficit that led to the behavioral change will be frustrated in its goals.

This problem is touched upon first not only because it is often the feature that is first identified, but because it is the early and potent influence at an age when impressions and concepts are easily crystallized, later to be altered only imperfectly and with difficulty, that is important. I consider it tragic that, under the guise of economy of effort, many school systems defer testing reading ability until the third grade. The reasoning behind this is that many marginal readers ("late bloomers" in educational jargon) become proficient enough to get by without additional help. Those that would have benefited from special help earlier may require many times the effort to learn what they have the maturity to handle at this later age, but no longer have the motivation to attempt. And all the intellectual exhortation parent and teacher try will not erase the loss of the thousand smiles of approval that were *not* the child's yield during those earlier years. The argument is sometimes offered that special help is wasteful since many children do "catch on" to reading without special help. I believe, but cannot prove, that those late-comers would achieve earlier, without as much negative self-concept to complicate their later years, and would then not require long-term continued special help. The examples of this are legion to any who take the trouble to look.

A second practical point is the emphasis on early recognition of the dyslexic propensity. Many of these children are recognized by their parents as physically more active than average ("he's all boy"). Perhaps the word uninhibited is descriptive of some of their behavior. Their attention is quickly seized by every new interesting thing, and in spite of warnings and admonition they interrupt their elders' conversation without hesitation with every new thought. Sitting still is even more of a problem for them than others their age. Although puzzles of geometric forms are usually difficult and hence unattractive as toys, yet they often have a compulsion to dismantle all toys into their least common denominators, and surprisingly may be able to reassemble them. Not rarely they are somewhat awkward in manual dexterity, at the same time loving outdoor play and games. The trouble with spatial configurations that discourage them from puzzles make them sloppy operators with crayon and paints and their crude block lettering improves but slowly with time. Telling time is a problem—not just the confusing fact that the longer hand relates to the shorter time, but the geometric separation of the numerals as a concept of time elapsed is not grasped. Sequential time relationships are also puzzling and a perpetual state of confusion may exist about when is tomorrow, yesterday, the day after tomorrow, the day before yesterday, and so on. It is sometimes baffling to the parent to explain patiently these simple concepts without the child understanding, and then to discover that this same child knows

the time, channel, star and sponsor of every television program for the next four weeks! Although motivation may account for some of the difference, there still is a conceptual difficulty underlying the performance. Mothers very often note the prevalence of these various manifestations in their children, and note that they are excessive and that maturation does not remove them as well as in other children. Such a mother is almost invariably reassured by doctor and educator alike that "this is normal" and they should not be an anxious mother.

It seems reasonable to me that the nonspecific but highly suggestive features mentioned should lead to testing by individuals knowledgeable in identifying the child with special difficulties. The point of testing the pre-school child is not to label him with a number, which in spite of alleged precautions in most school systems is taken by the individual teacher to identify a child who is not worth helping, but rather to mark him as needing extra help, sympathy and understanding. When the family can afford it, outside tutorial help may benefit a child with only slight trouble, but if severely dyslexic, this help is usually inadequate.

The most extreme instances of dyslexia can sometimes squeak by the first grade by memorizing and by a permissive promotion policy. Amazingly, often the parents may know only that the child does "C" work and "should learn to control himself better" at the end of the first grade. The greater demands in second and third grade are too much, however, and it is rare not to know that trouble exists by that time. Without specific testing, however, the problem at that time may include a major behavior problem which can obscure the learning inadequacy that produced it. In the seriously involved dyslexic, experienced testing can predict the reading disorder at least a year before the first grade. One or more years in schools geared to one-to-one teaching and a knowledge of a variety of empiric approaches are an extremely worthwhile investment at the earliest possible time. Not only does all learning seem easier in the younger mind, but the destruction of motivation and a negative attitude toward instruction develop rapidly and may be close to impossible to overcome.

Children with this problem are quite distinct from the globally retarded child, although it is depressing to see how often the two are confused. Even when they are identified, most school systems have either no provision for either, or only a facility for the retarded. Inclusion of a bright but non-reading child in such a group is a very destructive psychological force and often no school is preferable to placement in such a class.

The value of a variety of special eye movement training programs remains under judgment. Too often these are offered as the major therapeutic approach, and they are not. One of the problems in their evaluation confuses the evaluation of any assistive effort, whether it be of a particular kind of curriculum, training of motor coordination and so-called patterning, or what-have-you. In most instances the therapeutic measure is applied soon after the problem has been identified. Regardless of what corrective measure is then instituted, other factors are likely to be operative. The child who has till now been the source of parental disapproval, pressure, concern and apprehension (because of poor performance in school, misbehavior, not trying, and so on) suddenly finds sympathy and understanding and a new helpful outlook on life. Since in most instances he really wanted to learn but got lost in his attempts, he now may optimistically try again to conquer his foe, and for a few weeks benefit occurs. If the problem was minimal, this may get him back into a level of performance in which he can hold his own. If more severe, the temporary improvement fails, but the therapeutic regimen may still get the credit for a success. Controlled studies are extremely difficult to perform, but are badly needed. In the meantime the attitude of many educators is that it may help a little, so why not? One should, however, inspect the time and money available to a family and help the family to direct it to the most needful areas, and until better evidence is available, unless clear-cut visual abnormalities are present, the more esoteric eye problems should stand second place in the rank of therapeutic measures.

More obvious to the neurologist, but more controversial among educators, are the measures designed to alter hand and/or eye dominance. There is no convincing evidence that this benefits reading skill. Similarly, training motor coordination may be desirable in its own right, but it should not be done for the sole purpose of assisting the brain to handle visual symbols. These two measures are legitimate subjects for careful and objective research, but those few studies performed by unbiased groups have so far yielded negative results.

Finally the question of medication arises. Many of these children, because of their fidgets

and wiggles in the classroom, have had a trial of sedatives or tranquilizers. The effect of these drugs is fairly predictable in these children—they may become cross and irritable, or when sedative levels are reached, their intellectual performance and attention drop off even more than without drugs. Occasionally small doses of a phenothiazine may be helpful. Paradoxically, as many physicians have come to know, drugs of the amphetamine series may be beneficial. Instead of increasing the overflow of physical activity and irrepressible behavior, the child may now appear to funnel more persistent and undivided attention to the task at hand, and the useless and annoying motor activity may melt away. At first glance it may seem that the effect of the stimulant is that of a tranquilizer. This is a superficial semblance, however, and attentiveness, and with it learning capacity, seem to increase. Most youngsters will give this response to 2.5 mg. of d-amphetamine, or 5-10 mg. of methylphenidate hydrochloride (Ritalin) given once in the morning. Occasionally a second dose at noon is helpful. A rare child will become hyperactive and apprehensive on this dose, and will not benefit on any dose. The children practically never report any awareness of feeling differently, and this absence of a pleasurable response combined with the open and non-secretive manner of receiving the drug are adequate as reasons to remove any fear of addiction or habituation. In my experience larger doses have never been resorted to, and the use of time span granules in larger doses is contraindicated. The use of a larger dose of d-amphetamine combined with a barbiturate is a contradiction and there is no evidence to recommend this over a smaller dose of the basic drug. The desired benefit from the drug often continues unabated through a school year, but when apparent tolerance occurs it is worthwhile discontinuing for two to four weeks, and having at least a trial of reinstitution. In attempting to judge the worth of the drug it is essential to seek the opinion of the classroom teacher. Not rarely the teacher will give a very favorable report of better attention, less disinhibited behavior and a more cooperative attitude, while mother will see the child when the drug has worn off and he may in fact be a little more cross and irritable than before. There is no known value in giving the drug if neither teacher nor parent can see a consistent benefit. It should be obvious that this kind of drug treatment is at best an aid in a situation where every assistance is desirable. It should on no account be considered a substitute for measures of a direct educational nature.

Athough children that fit the rather permissive and loose definition here considered are frequent in the population there is a large number of children who are not as bright, and whose lack of total intellectual capacity is first challenged by the reading attempt. Most authors seem to have little trouble in talking about this group as separate from a more rigidly defined group of dyslexics. In individual cases, this classification is not nearly so easy. There are some who believe that determination of the existence of organic brain injury in a child with reading disability precludes any effort at education except in a group of the most heterogeneous varieties of brain disease. This is not so, and the methods that aid the apparent dyslexic, may be quite fruitful even when a clear organic process is present. The more important distinction is both the severity and the extent of the organic affection. Again the organic affection of Helen Keller comes to mind, and the remarkable intellect that might easily have remained locked within had not an unusual effort been made.

We owe it to our little patients at least to look carefully at their capabilities, a hard task in the young child, help parents explore the maze of conflicting professional and pseudo-professional advice available to them, and in our own attitudes be willing to remain somewhat optimistic and encouraging until competent and unbiased evidence can be offered to support the many easily-voiced opinions now heard: these may be unrestrained optimism for all, or the too-ready rejection of even minimal efforts to help.

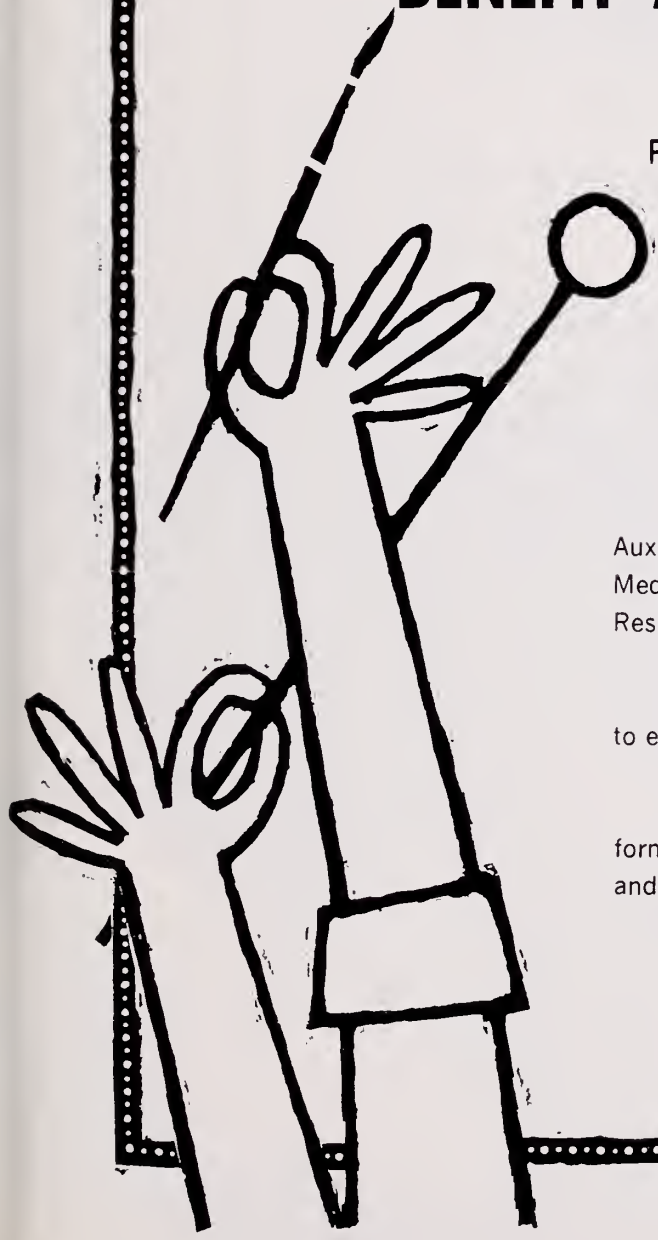
References

1. Benton, C. O. Jr.: Dyslexia, J. Florida M. A. 55:898 (Oct.) 1968.
2. Rubin, M. L.: Dyslexia and the Research Opbthalmologist, J. Florida M. A. 55:903 (Oct.) 1968.
3. Smitb, J. L.: Dyslexia and tbe Neuro-Ophthalmologist, J. Florida M. A. 55:906 (Oct.) 1968.
4. Mann, P. H.: Dyslexia—An Educator's View, J. Florida M. A. 56:24 (Jan.) 1969.
5. Critchley, MacDonald: Developmental Dyslexia, London, William Heinemann Medical Books, Ltd., 1964.
6. Tbe Doman-Delacato Treatment of Neurologically Handicapped Children, Statement of tbe American Academy of Cerebral Palsy, American Academy of Neurology, American Academy of Pediatrics, American Academy for Physical Medicine and Rehabilitation Medicine, American Academy of Orthopedics, Canadian Association for Children with Learning Disabilities, Canadian Association for Retarded Children, Canadian Rehabilitation Council for the Disabled, National Association for Retarded Children (U.S.A.), Neurology 18:1214, 1968.
7. Keeney, A. H. and Keeney, V. T., Eds., Dyslexia—Diagnosis and Treatment of Reading Disorders, St. Louis, C. V. Mosby Co., 1968.
8. Money, J., Ed., Reading Disability, Baltimore, Johns Hopkins Press, 1962.
9. Money, J., Ed., Tbe Disabled Reader, Baltimore, Johns Hopkins Press, 1966.

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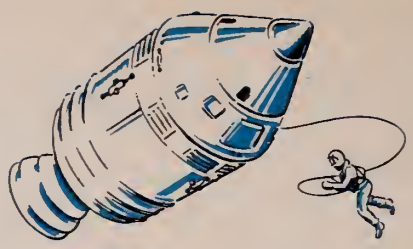
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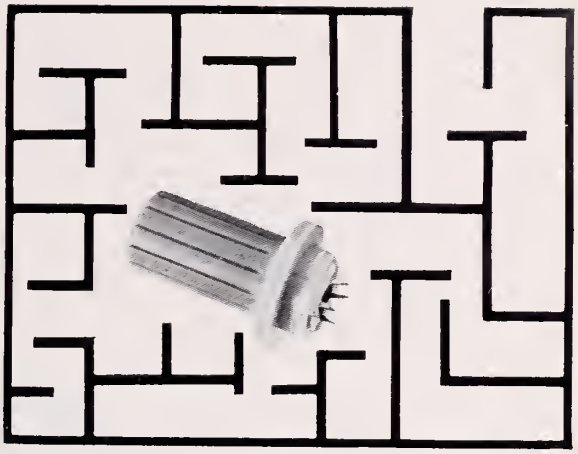
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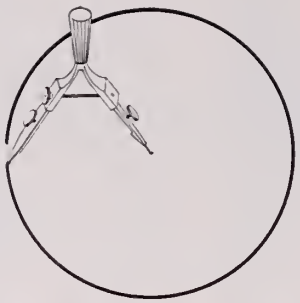
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The Coming Legislative Session

Floyd K. Hurt, M.D.

The 1969 Florida legislature will convene April 8, 1969.

Again this year we are fortunate in having Mr. Al James of the Florida Medical Association staff represent us in Tallahassee. As many of you know, Mr. James is a registered lobbyist, as required by Senate and House rule, and has been visiting the state capitol for eleven years. This will be his seventh session.

Al's primary responsibility is appearing before committees to discuss legislative bills in which Florida physicians are particularly interested, and also those bills sponsored by other parties which directly or indirectly concern the health care of Florida's citizens. In addition, Al calls on the legislators daily to assist them in research work concerning these bills. He explains the bills and often helps them write comments and speeches.

Al relates that there has been only one instance in which FMA has pushed for legislation which primarily concerned the economic welfare of physicians: this was the bill making it possible for professional service corporations to be formed. It is true that this not only benefited physicians, but also attorneys, dentists, architects, veterinarians and other self-employed professional people. Although we were interested in establishing this law primarily for our own benefit, all other legislation that the Association has supported and pushed has been in the interest of better health care of our citizens.

On January 25, in Orlando, the Association sponsored a conference on legislation which was well attended and quite comprehensive in its presentation. For the coming session of the legislature, we have six FMA-sponsored and supported measures on the following subjects: (1) Blood banks, (2) Revision of the Medical Practice Act, (3) Implementation of Title 19(XIX), (4) Therapeutic abortion, (5) Repeal of Basic Science law and (6) Utilization review committees.

The last one is a bill providing for exemption from civil liability for physicians serving on utilization review and hospitalization committees of local and state medical societies and in particular on those committees that are required by law.

I would urge every member of the Florida Medical Association to become acquainted with all of these bills, or at least the ones that they feel particularly concern their type of practice. Talk to your state legislative representatives about these bills and, if at all possible, I would urge you to attend a meeting of the legislature in Tallahassee at some time during the session. Not only would you be most welcome as a "visiting physician for the day," but also you will find that the trip will be well worth the expense and time involved, for we believe that you will return home a more knowledgeable physician and will have earned the respect of your legislative representatives in Tallahassee.

Dr. Hurt is secretary-treasurer, Florida Medical Association.

1969 Florida Medical Association Conference County Medical Presidents and Secretaries A Valuable and Informative Experience

Albert J. Menendez

The Eleventh Annual Conference of County Medical Society Presidents and Secretaries, held in Orlando at the Robert Meyer Motor Inn January 25-26, was attended by representatives of 27 of the state's 43 local societies. Total registration was 149.

President Jack Q. Cleveland, M.D., of Coral Gables, opened the two-day meeting, noting that for the past ten years the conference had proved to be a successful means of acquainting county medical society officers with the progress of current FMA programs as well as continuing problems.

Dr. Ernest B. Howard, acting executive vice president of the American Medical Association, reviewed the continuing problems and challenges facing organized medicine nationally. He mentioned rising health care costs, manpower shortages, physician-hospital conflicts, governmental intervention, continuing thrusts for extension of medicare, cultist practices and the implications inherent in the awesome scientific advances now occurring. He concluded with a call for positive, imaginative and vigorous leadership, especially since the current climate in Washington appears to be favorable to the free practice of superior quality medicine in the U. S.

Dr. Richard C. Dever of Miami, chairman of the FMA Council on Scientific Activities, then discussed the changed format for scientific activities at the annual meeting, and an upcoming statewide conference on medical education being sponsored by the Association. Next, Dr. Granville W. Larimore discussed the Florida Regional Medical Program for Heart Disease, Cancer and Stroke, diseases which he noted are responsible for a higher death rate in Florida than in the nation. Dr. Larimore is state director of the FRMP, headquartered in Tampa.

Mr. Menendez is program analyst, Florida Medical Association, Jacksonville.

Following Dr. Larimore, Mr. Robert Roesch discussed the objectives and goals of the Florida Comprehensive Health Program which he directs from Tallahassee. The participants heard next from Dr. James W. Walker of Jacksonville, chairman of the FMA Council on Allied Professions and Vocations, who discussed the acute shortages in medical vocations and paramedical personnel. Dr. Walker touched on the problems of nursing education, the shortage of teaching faculty in medical schools and the existence of unqualified personnel in many hospitals. He also offered many thoughtful recommendations for the resolution of these problems.

Dr. Joseph G. Matthews of Orlando, chairman of the Association's Council on Specialty Medicine, discussed the new Workmen's Compensation medical fee schedule. The Saturday session ended with a presentation by chairman Dr. Edward G. Haskell of the FMA Committee on State Legislation, Tallahassee, on medical and health care legislation before the 1969 legislature. Included in his discussion were bills dealing with therapeutic abortion reform, the basic science law, utilization review committees, blood banking, implementation of Title XIX and revision of the Medical Practice Act.

Dr. Henry J. Babers Jr. of Gainesville, President-Elect of FMA, presided over the Sunday morning session.

The first speaker was Association secretary-treasurer Dr. Floyd K. Hurt, who discussed the reasons for the great increase in professional liability rates statewide. Dr. James M. Ingram of Tampa followed with a presentation of the recent activities of the 13 committees of the Council on Medical Services which he heads.

After Dr. Ingram's remarks there followed a discussion of county medical society programs and problems. Representing the large county was Dr. Wilbur C. Sumner, Duval County Medical Soci-

ety president, who discussed such large county problems as drug abuse, environmental medicine, and shortages in ambulance service. Dr. James R. Forlaw, president of Palm Beach County Medical Society, represented the medium-sized county. Dr. Ethel H. Trygstad, president of Collier County Medical Society, represented the small county. All three presidents acknowledged the need for an imaginative full-time executive director.

Sunday's meeting concluded with a discussion of specialty society programs and problems. Society presidents Dr. Alfred D. Koenig of the Florida Psychiatric Society and Dr. Franklin L. McKechnie of the Florida Society of Anesthesiologists represented their state groups. Dr. Koenig noted the "image" problems confronting psychiatrists, recent state legislation regarding "civil rights" and psychiatry, and community mental health programs. Dr. McKechnie discussed some of the medicolegal and manpower problems facing anesthesiologists. The conference was adjourned after a brief discussion of many of the questions raised in the session.

One unexpected highlight of the conference was a short address by Dr. Gerald D. Dorman of New York, president-elect of the American Medical Association. Dr. Dorman, who was well received by the audience, encouraged the participants to defend the eminence of American medicine against the increasingly virulent charges that the U. S. compares unfavorably with many Western European nations in such areas as infant mortality and life expectancy. He cautioned against simplistic interpretation and invalid inferences.

Other significant events included a Workshop on Medicine and Religion and a Workshop on State Medical Legislation, both of which preceded the general sessions. At the latter workshop, Mr. William L. Watson, executive director of the American Medical Political Action Committee, gave a very illuminating report on the role of AMPAC and that of the new AMA Division of Public Affairs. He also warned the participants to redouble their efforts to obtain beneficial legislation and to guard against apathy and overconfidence. Dr. Thomas S. Edwards of Jacksonville, state FLAMPAC chairman, discussed the role of that organization in the recent elections. Several speakers then discussed the FMA legislative program for 1969.

All participants agreed that this year's conference was a valuable and informative experience, one that opened many new vistas of concern. □

ON CALL

ALL DOCTOR'S WIVES

ANNUAL MEETING

Woman's Auxiliary to FMA

May 14-18, 1969

AMERICANA HOTEL

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HIGHLIGHTS

Wednesday, May 14

4:00 p.m. Executive Committee, President's suite

7:00 p.m. Party for State Officers and Board, Hospitality Suite

Thursday, May 15

9:00 a.m. Preconvention Board Meeting

12:00 President's luncheon, honoring Mrs. John Chenault, Decatur, Ala., President-Elect, WA-AMA; Past State Presidents and current County Presidents

2:30 p.m. Annual Meeting, First Session, House of Delegates

Friday, May 16

8:00 a.m. Complimentary Breakfast

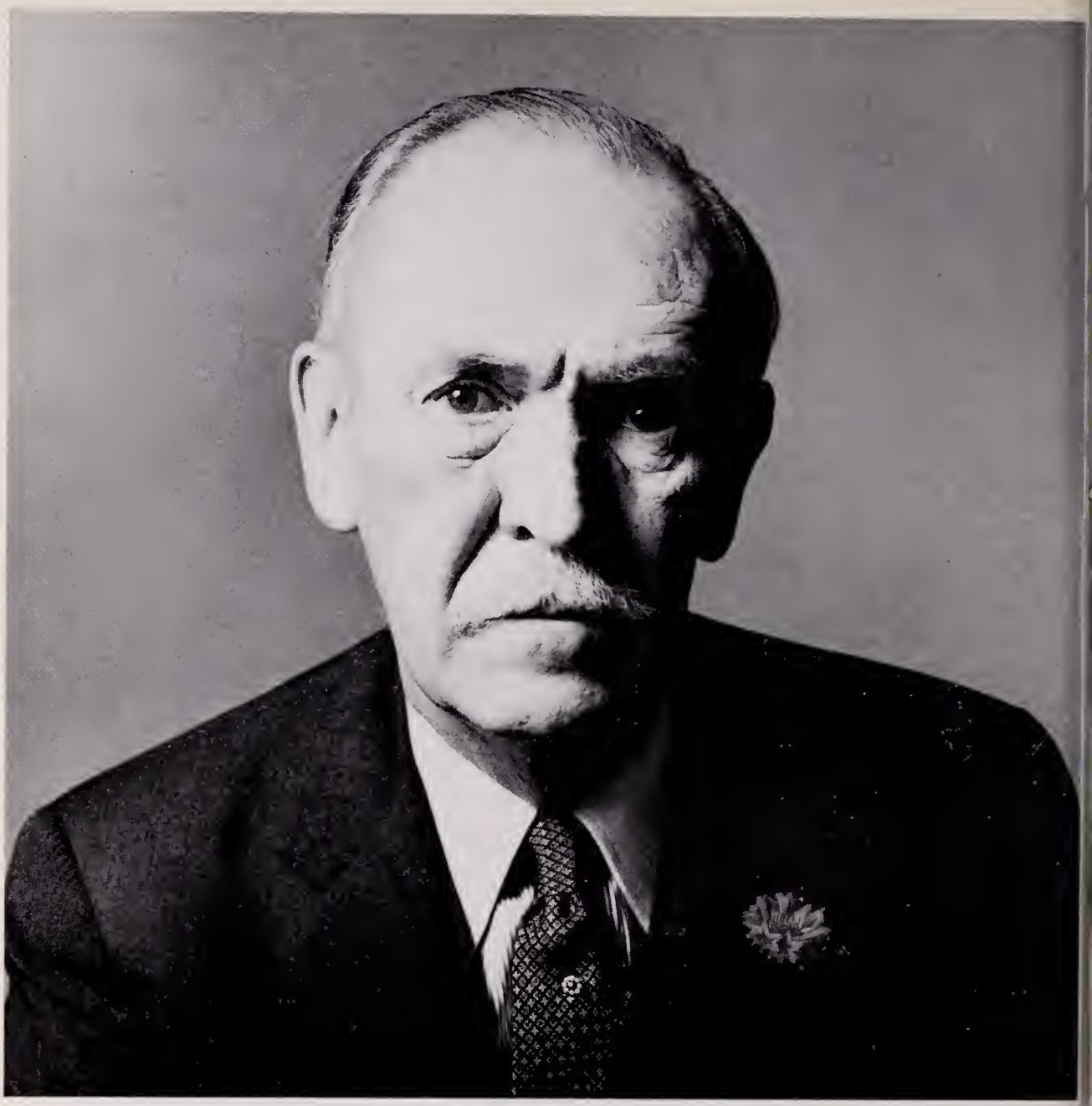
9:00 a.m. Annual Meeting, Second Session, House of Delegates, Installation of Officers

12:15 p.m. Annual Auxiliary FLAMPAC Luncheon with special speaker

2:30 p.m. Postconvention Board Meeting

SPECIAL FEATURE: ANNUAL AMA-ERF ART SHOW

See April Journal for complete details.



Help the Needy!

This patient may appear to "have everything" but, like so many people getting along in years, he may well be in need—*medically*. Though there is no evidence of organic disease, he does have symptoms (fatigue, vague aches and pains, malaise) that may be indicative of—

a need to maintain anabolic balance... to counteract declining gonadal hormone secretion and forestall premature degenerative changes related to estrogen deficiency

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Thiamine HCl	—	5.0 mg.
Thiamine mononitrate	10.0 mg.	—
Riboflavin	5.0 mg.	—
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Warning: Some patients with pernicious anemia may not respond to treatment with the Tablets or Capsules, nor is cessation of response predictable. Periodic examinations and laboratory studies of pernicious anemia patients are essential and recommended.

Side Effects: In addition to withdrawal bleeding, breast tenderness or hirsutism may occur.

Suggested Dosages: *Male and female*—1 Tablet or Capsule, or 3 teaspoonfuls Liquid, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).
In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

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Utilization Review—Medicine's Responsibility

Dale Douberly

Dr. Warren Quillian and others gave us a fine discussion of "The Blues" in Florida in the February issue of the Journal. *This comment was prepared at the request of Dr. Quillian and your editor.—Ed.*

Medical care, the product, is not a static commodity. Over the years such services have increased in quantity and quality with a resultant increase in unit and total cost. The challenge is how to make these services available to all at reasonable cost. How can this be done if we have no means of measuring *normal use?*

More and more the consumer assumes an important role. Formerly docile and easily led, he is now educated and sophisticated, particularly in medical matters. He realizes the benefits of quality medical care and its contribution to his well-being and longevity. He is aware now of the advances in medicine and earnestly desires the best in care for himself and his family. He is willing to pay a good share of his income to fill his needs, but if he can't afford it, he wants help to do so. How can he be assured of quality? How can he be assured of reasonable cost? Only if we have the capacity to measure can we assure him. Only if we have the capacity to measure can we identify his needs and solve the problems of distribution of services, making this quality care available to him.

Measurement—utilization review—is the tool that can aid. Utilization review can be likened to the weather in the comments Mark Twain once made when he said that everyone talked about the weather, but no one did anything about it. Florida Blue Cross and Blue Shield are trying. One immediate question arises—what right has a carrier to assume this role? The immediate answer follows: Blue Cross and Blue Shield are directly tied to the physician-hospital-patient relationship in modern medicine, the only agency with shared public and professional trust.

There is no doubt that we are the only agency with the existing records, data equipment and know-how needed for the job.

Another question arises: why do this at all? The answer to that one comes in one word: necessity. Or make it two words: absolute necessity.

This is what our Medicare contract states: "The Carrier shall (A) assist persons who furnish services in the development of procedures relating to utilization practices, (B) make studies of the effectiveness of such procedures and methods for their improvement, and (C) assist in the application of safeguards against unnecessary utilization of services furnished eligible individuals."

The temper of the times, the whole framework of medical economics today, the greater entry of government into the field with its demands, as in Medicare, for some utilization audit function—these and many other economic factors are involved.

Add to this the rising medical costs, increasing public and professional uneasiness, the demands for additional care, the broad basis of pressure for change and more change.

In utilization review, an essential in our study is insistence upon unprejudiced, scientific inquiry. We have no preconceived notions. We are not

Mr. Douberly is manager, Utilization Review Department, Blue Shield of Florida, Inc.

searching for a pleasant answer, but for right ones. Utilization review has always been an integral part of the Florida Blue Cross and Blue Shield operation in one form or another. Our basic concept has been to measure quality and efficiency of care against all available yardsticks—*with the matter of quality being reserved for judgment by physicians*. It has changed recently only in the sense that new tools, especially the computer, now make the measurements more accurate.

One of our first and most important tasks is to do away with any notion held by either professional or lay people that we are seeking to raise some giant mailed fist to smash some nebulous abuse.

Of course it *is* true that abuses will be found, for they exist in any enterprise of such size as medicine—or government, or the church—or insurance companies. We will find some inevitable skeletons but it is our intention to give them a quiet burial and not rattle their bones. This is not a culprit hunt. It *is* a search for better methods.

We have set up programs for our computers to produce patient care profiles for each of nearly 8,000 physicians and some 200 hospitals in Florida, plus extended care facilities and suppliers.

However, we learned long ago that a profile in itself is worthless. It is at best a background for the differing individual case, warranting an intense, personal examination—not in the sense of finding an evil-doer but in the discovery of the reasons for the difference. Some of these reasons will prove good, some bad. When they are not justifiable, full discussion follows, and everyone benefits.

The obvious cases are easy to determine. Follow-up action in these cases is also relatively easy. The grey areas, however, are something else again, especially in the field of medicine where professional qualitative judgment plays such a major role and where second-guessing can be dangerous. Here again, questions related to quality will be reserved for judgment by physicians.

Utilization review is not the whole answer to the utilization problem. Utilization review, by itself, cannot assure the most effective utilization of inpatient or outpatient facilities. To my knowledge, no one seriously believes that it will be possible, or desirable, to develop precise standards of utilization applicable to *every case* and enforceable by administrative procedures. If, however, it is agreed that these decisions properly belong to the attending physician, then should utilization be controlled only by indirect influences on his behavior? Should he not be encouraged to become directly involved? Shouldn't his self-control be encouraged? If standards are to be developed—are not these standards more likely to be practical and acceptable if tested and applied by committees of medical practitioners?

The most important thought to consider is that in the absence of effective utilization review by physicians, hospitals and Blue Cross and Blue Shield, it will certainly be attempted by consumers —be they employer, union, or more likely, government.

▶ Mr. Douberly, P.O. Box 1798, Jacksonville 32201.

Our Cover Artist



Claire Drew Thompson with Pamela and Flower Pot.

Marcellus Williams, her great-grandfather, left Fernandina in April 1870 to survey the area around north Biscayne Bay and the Everglades nearby.—Ed.

Our Mail

Law and Order

Marshall M. Criser, Esq.
President, The Florida Bar

Dear Mr. Criser:

I enjoyed your address to the F.M.A. as printed in the January, 1969, issue of the JOURNAL. The most important part of your entire speech, it seems to me, is the sentence at the end of the fourth paragraph: "It is the further responsibility of qualified citizens to remove and change the imperfections of law."

You are careful, as I am sure all good lawyers are, of your words and seem to make a very real distinction between the singular and plural forms of the word "law." As I interpret your remark, "law" is used to mean not only a specific act of a legislative body, but also the entire concept of orderly conduct—(your quote from Abraham Lincoln, for example, and your repeated [7 times] references to law and order). The qualifying word "valid" severely limits the application of your remarks, however. The plural in this instance would seem to include acts of Congress, state legislatures, ordinances codified by any number of municipal or county commissioners, and every directive of any regulatory agency at any level of government as well as many other "laws" that I have no knowledge of. Here you have carefully qualified the word by the use of the word "valid."

We both know that "laws" which are not valid find their way into codes of one level of government or another (for example, the Vagrancy and Sunday laws in the Florida Code). Further, the persons who find themselves oppressed by these laws are not often well enough informed nor financially able to try to change these laws by the democratic process that you refer to.

The "law" and justice (by this I mean the treatment of the people by the courts—justice of the peace, municipal, and county, as well as state and federal courts) often restricts the power of the individual citizen to obtain due process by the lofty means you describe. As examples, I cite the defendants who are denied counsel at their hearings or who are physically beaten by their jailers. Due process of law is a hollow phrase to them.

My whole point in writing you is to urge you and the many other carefully educated lawyers like yourself to make the effort to accomplish the tests of the validity of these "laws." Opportunities exist every day in justice of the peace and municipal courts to challenge the validity of these laws. You can do it, whereas the usual defendant cannot, and one of the reasons he cannot is the very high cost of services from attorneys.

It would seem to me that efforts to assure due process in the justice of the peace, municipal, and county courts would pay higher dividends than lecturing a group of doctors on law and order. Much violence and reaction must come from the helplessness and frustration that many must feel when they have been badly used by these courts. "It is the further responsibility of qualified citizens to remove and change the imperfections of law." You as a lawyer are eminently qualified.

Law and order, whatever that means, would be better served by helping to remove the imperfections of law that brutalize the ordinary man in his ordinary contacts with courts of justice and the officers of these courts. Excessive bail requirements, gross unfairness in punishment for traffic offenses, enforcement of certain laws and failure to enforce others, enforcement of certain laws against one class of citizens and not against another, are examples of "the law" that make a mockery of your statements and Abraham Lincoln's about the law.

In case you think I have some personal grudge against the traffic judge or the police, let me assure you that I have never had a citation. I have not appeared in court as a defendant and have always been treated most fairly by the police. The point is that people like me (and the doctors you lectured) are not the ones likely to disturb the "law and order" to which you seem so anxious to return.

Thank you for your address and the reprint. I hope every qualified citizen accepts your advice to remove and change the imperfections of law.

EUGENE J. BOYD, M.D.
SARASOTA

Journal Format

Many thanks to this outstanding writer and author of textbooks for young America. Congratulations to MacMillan Company for capturing her interest.—Ed.

Dear Dr. Stewart:

It was a real pleasure to see the Christmas copy of your JOURNAL, with its attractive format, artistic cover, and inspiring editorial. As I leafed through it, my wonder grew that you had found time to become so well acquainted with type styles, layout, make-up, and so on. It must be an inborn talent, for many professional editors fail to turn out such beautifully coordinated work. Few people realize how greatly typography, illustration and make-up can enhance the impact of any printed material.

Quite a few months ago you showed me an issue of the JOURNAL and said that it was your intention to put it into a more attractive format. It was then a very plain-Jane piece of printing that certainly did not dignify its content. The December issue proves that you can now say, "Mission accomplished."

Congratulations! May the coming issues under your editorship prove equally satisfying.

MAE KNIGHT CLARK
CORAL GABLES



Dyslexia

Dear Editor:

I wish to thank you for the publication of "Dyslexia, An Educator's View" by Philip H. Mann, Ed.D., in the January issue of the JOURNAL. It is a dispassionate and reasonable statement from a professional educator recognizing areas of inadequate knowledge and faulty communication that plague the physician and the educator in bringing their skills to the aid of the children with learning disabilities.

In this area emotional feelings easily are evoked that are wasteful of the efforts we should be making—the medical scientist to observe, analyze, and explain; the practitioner to counsel, advise, and occasionally treat, and the educator to continue improving a pragmatic program of instruction.

It is heartening to see a willingness in the JOURNAL to open a dialogue and let questions be asked, criticism leveled, and eventually understanding be increased on the part of all of us.

O. M. REINMUTH, M.D.
MIAMI

Dyslexia

Dear Editor:

Your policy of appending "Editorial Comment" to scientific articles in the JOURNAL is a good one. It adds interest, but it may also have risks as exemplified by the glaring lack of editorial attention to the article—"Dyslexia, An Educator's View" in the January issue.

This is one of the saddest articles I have ever encountered in a scientific journal. It offends with respect to lack of theme. The style is semantically jolting to the reader. Violations of logic and continuity and pleasant construction occur in almost every deplorable sentence.

This exercise in communication by a professorially certified expert in communication, about one of the commonest of communication handicaps, is a discredit to both the JOURNAL and his university. On such grounds, an editor, quite unacquainted with the subject, could properly have decided that the article was beyond repair by the editorial pencil and returned it to the author. An editor with some slight acquaintance with major historical contributions to the subject would, I hope, have quickly disposed of it in some traditional receptacle without encouraging the author to try again.

J. ROBERT CAMPBELL, M.D.
TAMPA

Dyslexia

Dear Dr. Mann:

We are pleased to inform you that your excellent article recently published has been selected by our editors for digesting and publication in a future issue of *Pediatrics Digest*.

All of the digests appearing in *Pediatrics Digest* are supplied to us by the original authors and we would be grateful if you would abstract your article typed in the space provided on the back of this letter.

Pediatrics Digest is distributed free of charge to all pediatricians in the United States. Its cardinal value is to keep its 17,500 readers informed of the world's current pediatric literature, therefore, we would appreciate your returning your abstract to us in the enclosed envelope within 30 days.

Kindly note corrections, if any, in your address above, and in the title and other information noted on the reverse of this letter.

Joseph R. Christian, M.D.
Editor

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Dyslexia

Dear Editor:

May I endorse Philip Mann's article "Dyslexia, An Educator's View" in the January issue of the Florida Medical Journal? Each physician and educator who comes in contact with the perceptually handicapped should have as much understanding. I am sure interdisciplinary action could provide help at a much more rapid pace for the thousands of children with learning handicaps in our state. These children need special guidance to fulfill their potential level of achievement.

There is still confusion and mixed feelings, but the need for medical science and educators to move ahead together is imperative. As a result of our doubts we have children shuffled around by the schools, anxious parents who do not understand, and finally the poor child suffers emotionally as well as educationally.

The public may be influenced by opinions that lead school boards to accept policies of complacency and not increasing expenditures. Scientific data is being formulated and we should not permit articulate dissenters to sway us from effective new methods which have been proved in clinical studies.

We must adhere to Dr. Mann's willingness to pool resources and information between education and medical science. These children desperately need the aid our present scientific age offers.

Our first course is to educate ourselves to these possibilities.

Sallye (Mrs. James R.) Jude
Miami

Anna Darrow's "T" Model

Dear Editor:

The historical supplement in the Journal is a very desirable addition. I am referring to the August 1968 issue.

I found the story about Dr. Anna Darrow very interesting. Her description of a second gear made me wonder if her automobile was really a model "T" Ford.

I owned two model "Ts," each of which had only two speeds forward.

C. L. Rickerd, M.D.
Daytona Beach

the "Action" gap

Of the more than 100 different types of cancer, colon and rectal cancers are unique for two compelling reasons:

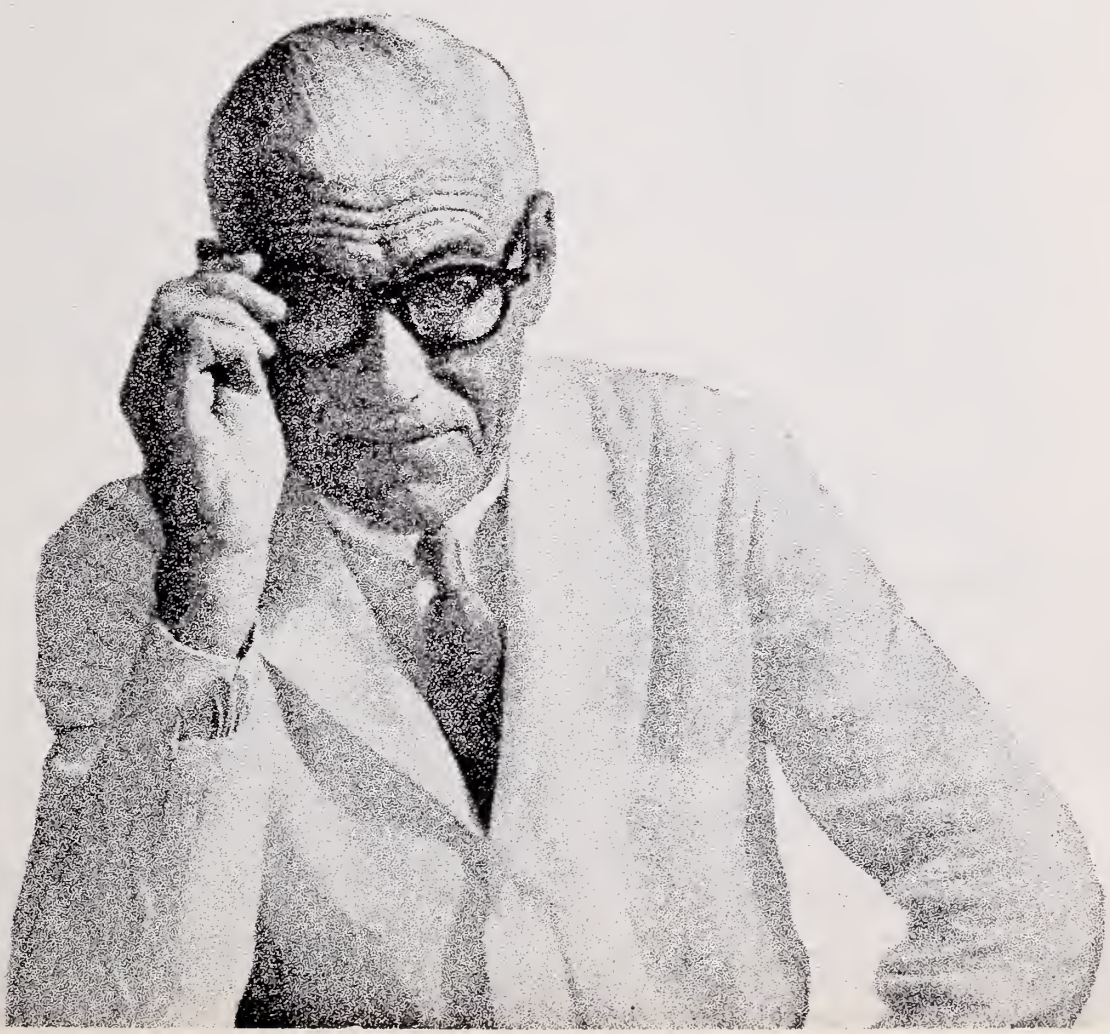
High incidence:	Annual new cases number about 73,000. Deaths now total 46,000 a year.
High curability potential:	Early diagnosis and prompt treatment could save almost 75%. Survival rate is now only 44%.

How to close the critical gap between possible and actual survivals?

The "procto" can today help save more lives from cancer than any other step in the checkup. Which is why, in our constant emphasis on the importance of annual checkups, we urge the inclusion of a "procto" ...and make available films and other pertinent materials for the layman and the physician. We *are* closing the "communications" gap.

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5- 6 Florida Medical Forum, Fort Myers

8 Thirteenth Watson Clinic Annual Seminar, Watson Clinic, Lakeland

12-15 Teaching Conference in Clinical Cardiology, Hilton Plaza Hotel, Miami Beach

19-22 Trends in Systems for the Radiologic Examination of the Alimentary Tract, Sheraton Four Ambassadors Hotel, Miami

Mar. 31-Apr. 2 Current Trends in Chest Roentgenology, Fontainebleau Hotel, Miami Beach

APRIL

4- 5 Seminar on Adrenal Glands, University of South Florida, Tampa

18-19 Arthritis and Collagen Diseases, Mayflower Hotel, Jacksonville

25-27 Seminar on Blood Component Therapy, Manger Motor Inn, Tampa

26 Third Annual Seminar on the Advancement in the Diagnosis and Management of Cancer, Port-O-Call, St. Petersburg

MAY

8-10 "Infections—Clinical and Practical," Nineteenth Annual Postgraduate Seminar, Mount Sinai Hospital, Miami

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15-19 American Academy of Allergy, Americana Hotel, Bal Harbour

APRIL

19-24 Association for Research in Ophthalmology, Sheraton Sandcastle Hotel and Statler-Hilton Inn, Sarasota

28-May 1 American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour

30-May 3 Neurosurgical Society of America, Key Biscayne Hotel, Key Biscayne

MAY

2- 4 American Academy of Psychoanalysis, Holiday Inn, Bal Harbour

2- 4 Society of Biological Psychiatry, Hilton Plaza, Miami Beach

2- 5 American Psychoanalytic Association, Deauville Hotel, Miami Beach

3 American College of Psychiatrists, Deauville Hotel, Bal Harbour

4- 6 American Society for Adolescent Psychiatry, Miami

4- 9 American Society for Microbiology, Fontainebleau Hotel, Miami Beach

5- 9 American Psychiatric Association, Americana Hotel, Bal Harbour

19 Association for the Advancement of Psychotherapy, Hotel Americana, Bal Harbour

24-26 National Tuberculosis and Respiratory Disease Association, Fontainebleau Hotel, Miami Beach

24-26 American Thoracic Society, Fontainebleau Hotel, Miami Beach

A Misdiagnosis

Donald L. Howie, M.D.

Diagnosis is difficult even with the most thorough histories. When pertinent facts are concealed or when the pattern is not elicited by the proper questions, diagnosis may be impossible.

A 53-year-old man had had an intermittent illness for a number of months which consisted of malaise, gastrointestinal upsets and some dyspnea. On physical examination he had both systolic and diastolic murmurs heard best over the mitral area and x-rays disclosed cardiac enlargement. Further, there was history of rheumatic disease in childhood. Despite this, the local physician was not satisfied completely that the symptomatology was explainable on the basis of rheumatic heart disease.

The patient was referred to a university center where an entirely new work-up was obtained and after several days the man was returned to his home community with a diagnosis of rheumatic heart disease. Subsequently, attacks recurred.

At eight o'clock one evening, the patient arrived in the emergency room with shortness of breath, hypotension, rapid pulse and abdominal distress. He obviously was acutely and severely ill. One-half hour later he died. Four physicians had seen him in the terminal illness. The one woman physician present insisted she had detected a peculiar odor. The wife signed an autopsy permit.

An autopsy was performed that evening. These findings included cardiac enlargement, mild mitral valve deformity and no evidence of SBE. The stomach contained asparagus soup and showed a severe hyperemic erosion, localized particularly to the top of the rugae throughout the stomach. There was mild similar change in the first part of the duodenum. Because of the chronicity of the symptoms, hair and skin were collected.

Chemical tests on the gastric contents showed abundant cyanide. Screening tests for heavy metals on hair and skin after digestion showed a deposit compatible with arsenic. The police were notified and a search of the house turned up both cyanide and arsenic preparations stored on a shelf in the cellar.

The wife was arrested and subsequently told the police that she had been giving her husband some cyanide, but only in small amounts so that he would be just slightly sick and thus more dependent upon her. As a defense, she offered testimony to the effect that she was under the influence of barbiturates on the orders of her physician and really did not know what she was doing. Subsequent investigation of the doctor's prescribing habits resulted in the revocation of his license to practice.

The defense was not allowed. The woman was tried, convicted and sentenced to life imprisonment. She was, of course, assigned to the kitchen detail in the prison.

Homicidal poisonings do occur. The bizarre history, the patient who gets well in the hospital beyond therapeutic expectations, the paucity of physical findings where they should be readily evident, the timing of the disease process and, in this case, an educated nose, should lead to reasonable suspicion. Had the suspicions been developed prior to the final event, the patient might not have died.

Dr. Howie, Mound Park Hospital, St. Petersburg 33731.

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INTERNIST WANTED: For private practice netting $24,000 yearly. Pleasant surroundings in Jacksonville area. Seventy-five bed county hospital adjacent to modern office building with two colleagues. Write C-871, P.O. Box 2411, Jacksonville, Fla. 32203.

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INTERNIST OR GP: North Miami Beach, Fla. $18,000 start—leads to association. Contact Mr. Harold Kwart, 9999 N.E. 2nd Ave., Miami Shores, Fla. 33138.

GENERAL PRACTITIONER OR PEDIATRICIAN WANTED: For association with established physicians. Located adjacent to modern hospital near Tampa. Write C-874, P.O. Box 2411, Jacksonville, Fla. 32203.

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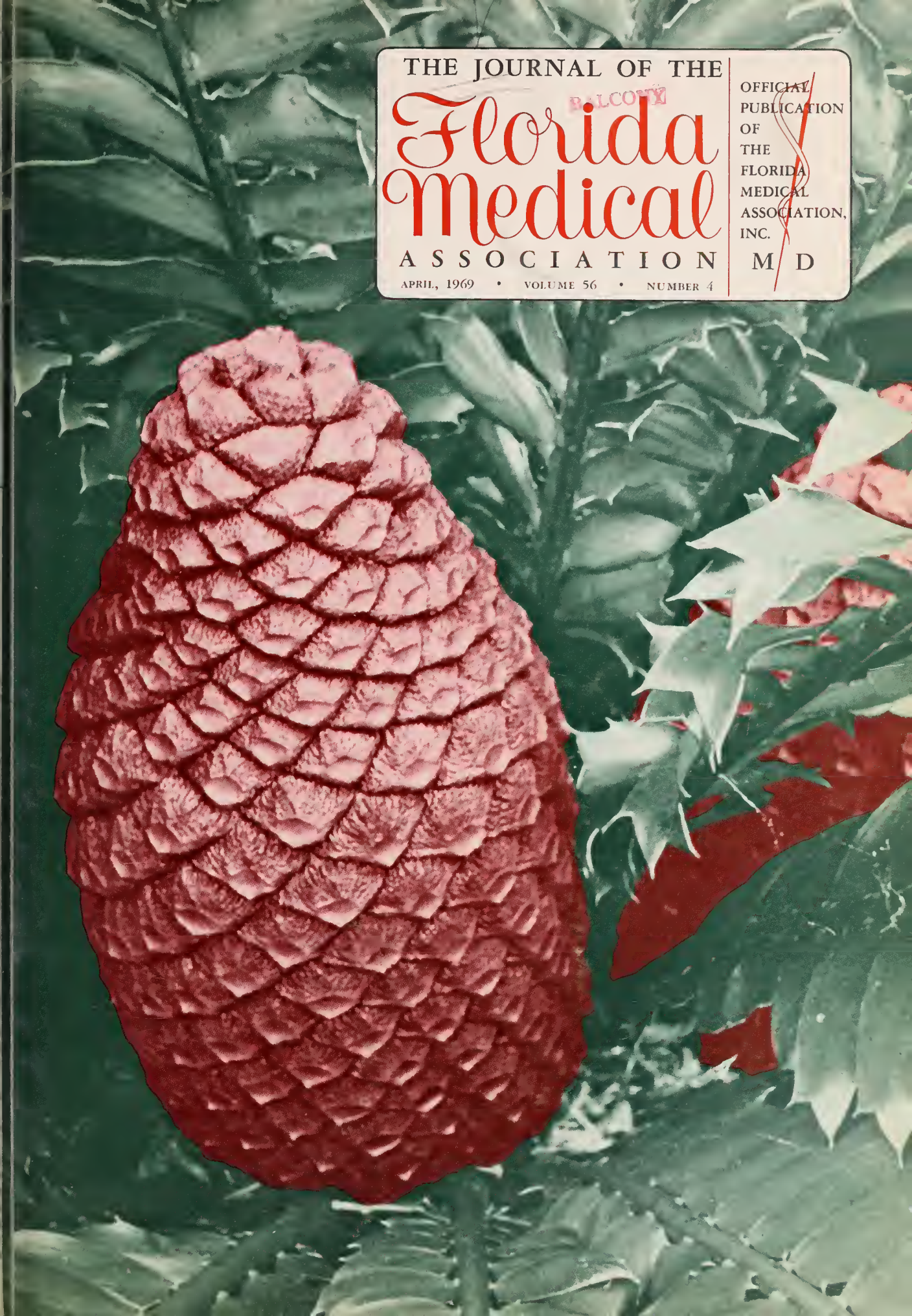
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Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.



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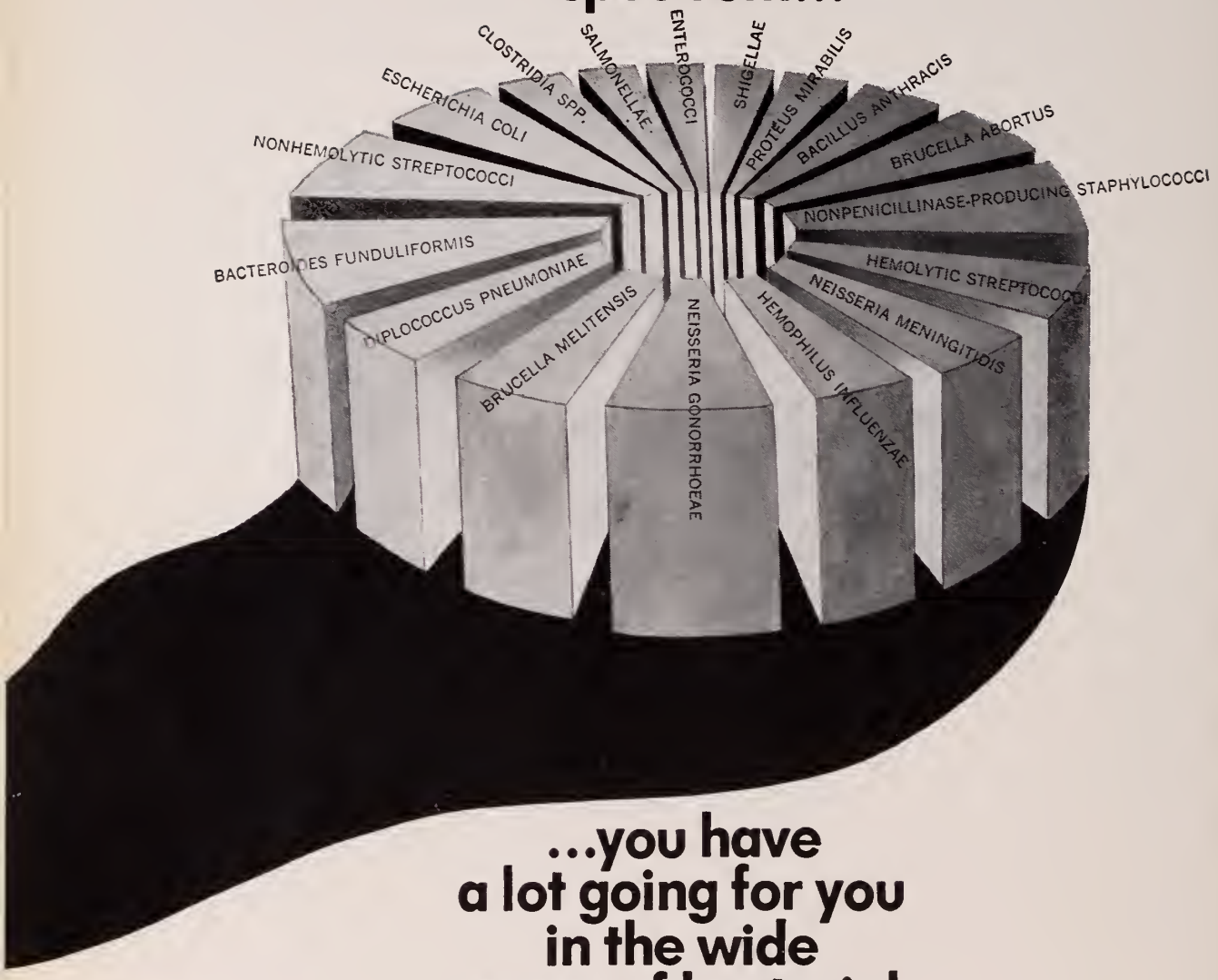
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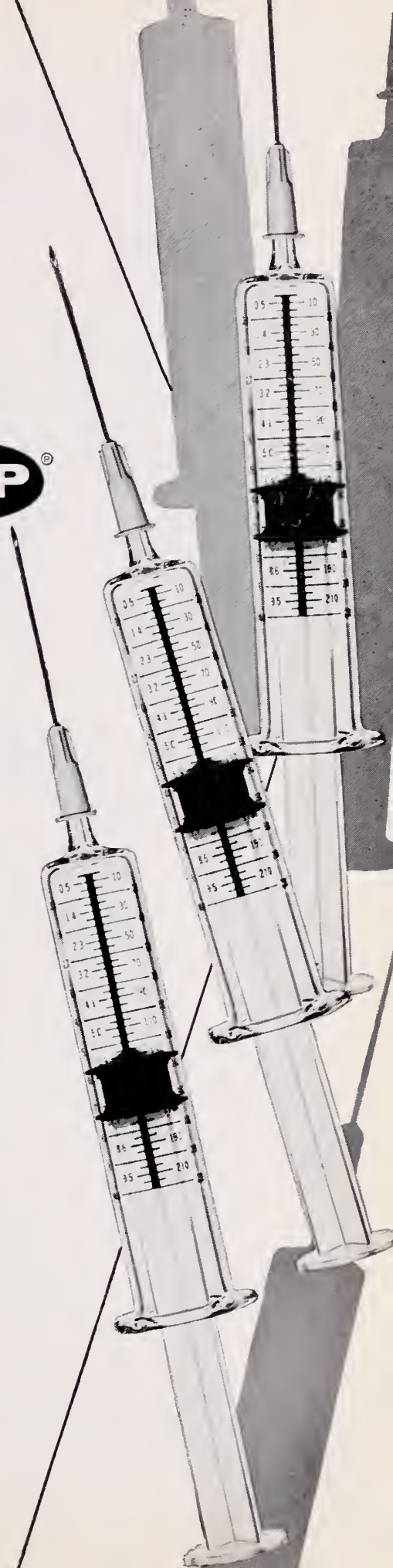
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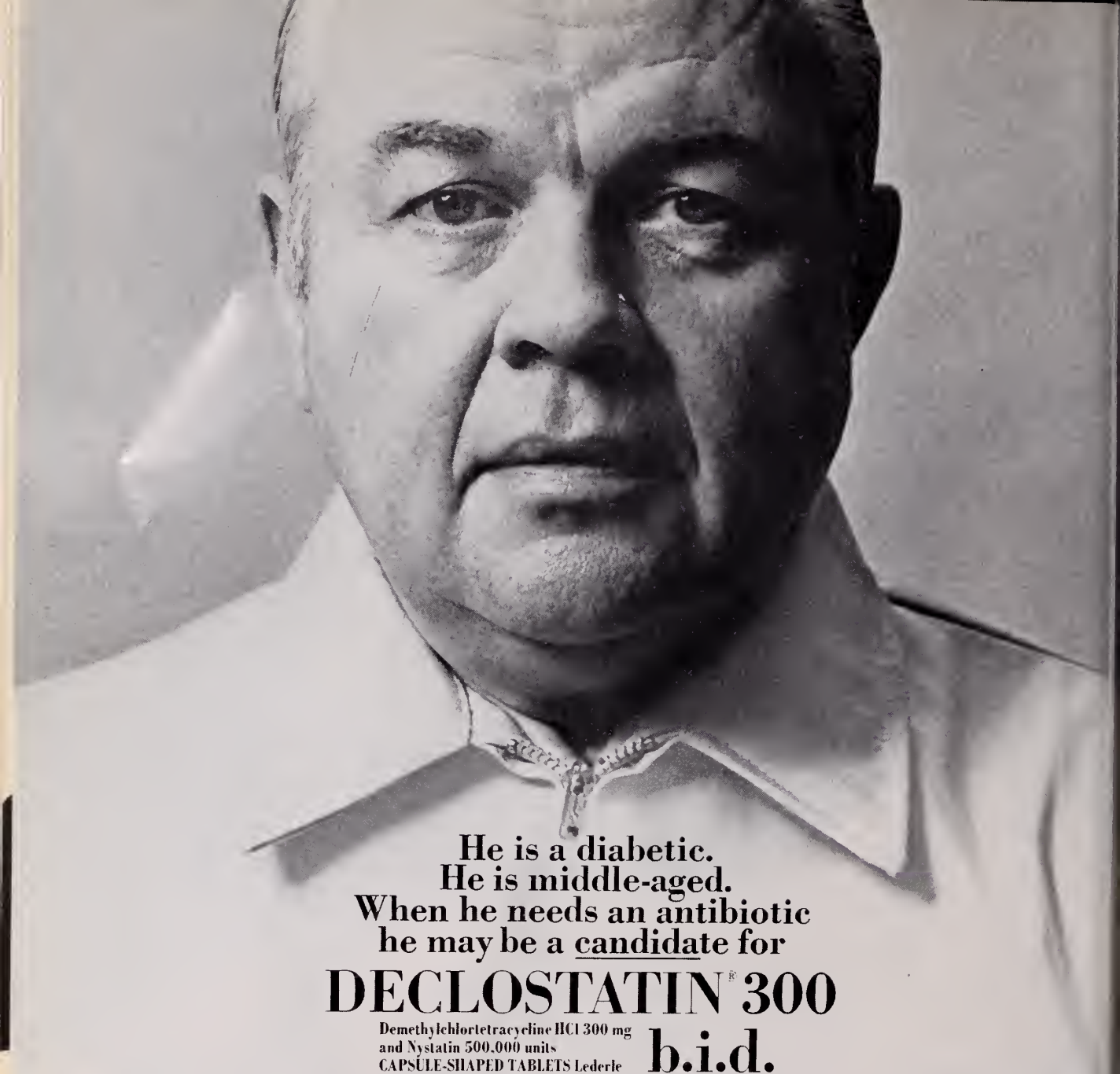
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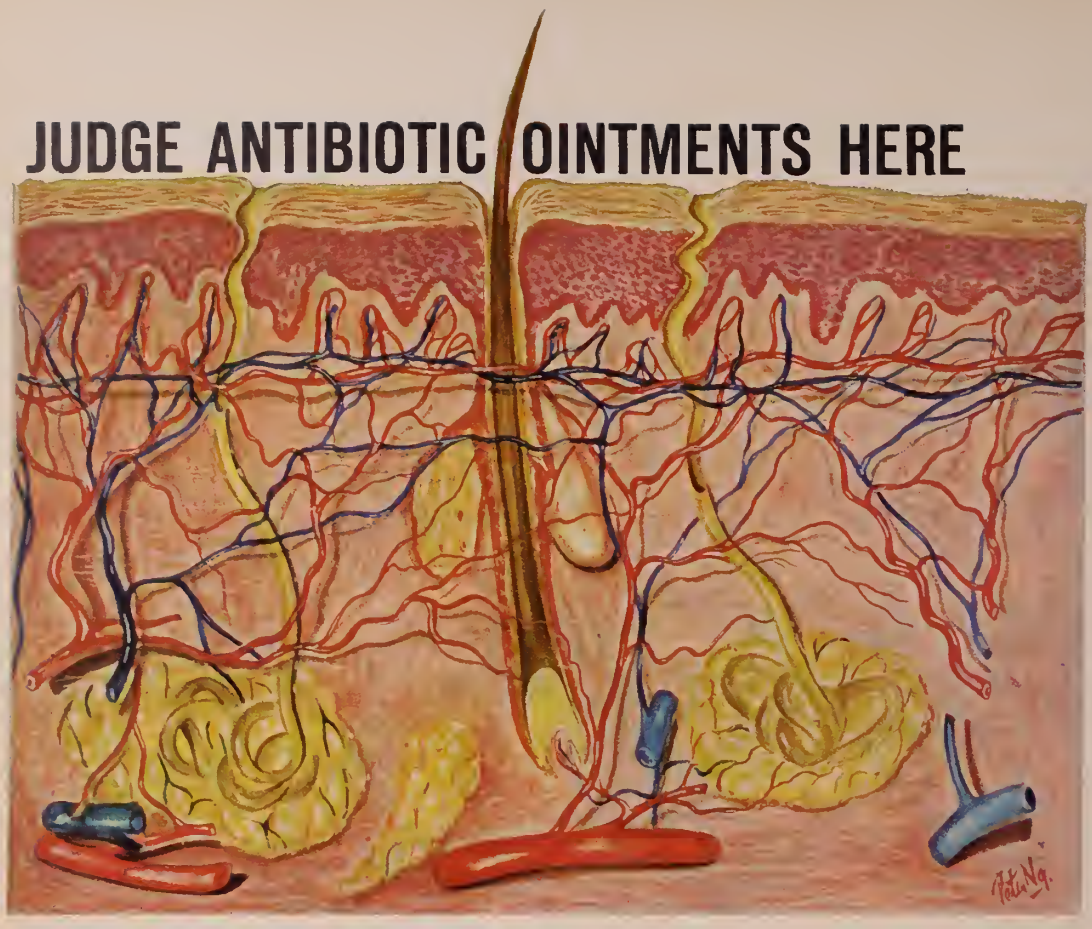
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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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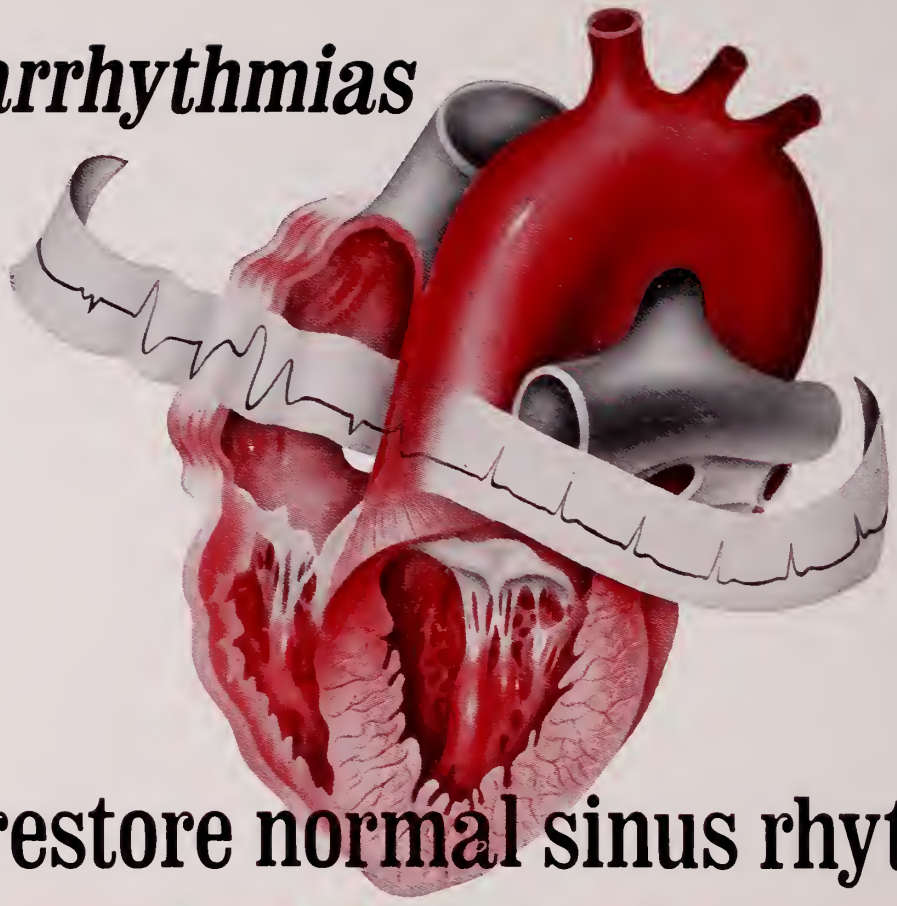
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APRIL COVER

This seed cone is from the female Encephalactos Ferox, a member of the oldest family of plants on earth. This cycad was imported from Mozambique in Africa. We are grateful to the Fairchild Tropical Garden in Miami for importing this startling plant and for giving us this month's cover picture.

in arrhythmias



to restore normal sinus rhythm

CARDIOQUIN TABLETS
QUINIDINE POLYGALACTURONATE

- A better-tolerated quinidine molecule – lower incidence of local G.I. irritation than with quinidine sulfate
- Many patients, unable to tolerate quinidine sulfate, may be converted to normal sinus rhythm with quinidine polygalacturonate
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BRIEF SUMMARY—INDICATIONS: Prevention and termination of atrial fibrillation, atrial flutter, atrial premature contractions, paroxysmal atrial tachycardia, paroxysmal ventricular tachycardia, premature ventricular contractions. CONTRAINDICATIONS: 1) Absolute: Complete atrioventricular heart block or history of previous sensitivity reactions. 2) Relative: Partial a-v and bundle branch block, severe cardiac failure and hypertrophy, chronic valvular disease, subacute bacterial endocarditis, acute infection, advanced age. PRECAUTIONS: The same as with all quinidine salts. Frequent ECG recommended; discontinue drug if ECG shows conduction system defects. Decrease dosage if signs of cinchonism develop. Initial therapeutic dose should be used as test dose for possible hypersensitivity. COMPOSITION: Each CARDIOQUIN Tablet (quinidine polygalacturonate 275 mg.) is equivalent in quinidine content to 3 grains quinidine sulfate. DOSAGE AND ADMINISTRATION: See PDR, pp. 946-947. Detailed information and references available to physicians on request.

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Service

"After all, we are merely the servants of the public, in spite of our M.D.'s and our hospital appointments."

SIR HENRY BASHFORD
THE CORNER OF HARLEY STREET

The opportunities to serve beyond the usual care of our patients are without end. The Association as well as all of organized medicine needs physicians to use their time and efforts in improving the "doctor image." We can't all be legislators, nor city councilmen, nor opinion-swaying orators or even members of our House of Delegates. But we can all exert a certain patient-doctor influence. And here is where all our "public relations" start—at the grass roots. It is here in the intimate personal relationship with the patient that all of us can serve best in improving the understanding of our problems by the ones we treat.

Too often, one who attempts to work for organized medicine and devotes endless hours to the betterment of his profession is labeled a "medical politician." Frequently this term is used derisively. If this term means attempting to improve his profession within the framework of his association, if it means hours spent in attempting to help work out the myriad knotty problems occurring weekly that concern us all, if it means that he has a feeling of obligation to his profession to work beyond the call of duty—then "medical politician" as a label loses some of its sting. Maybe more of us should attempt to achieve this title.

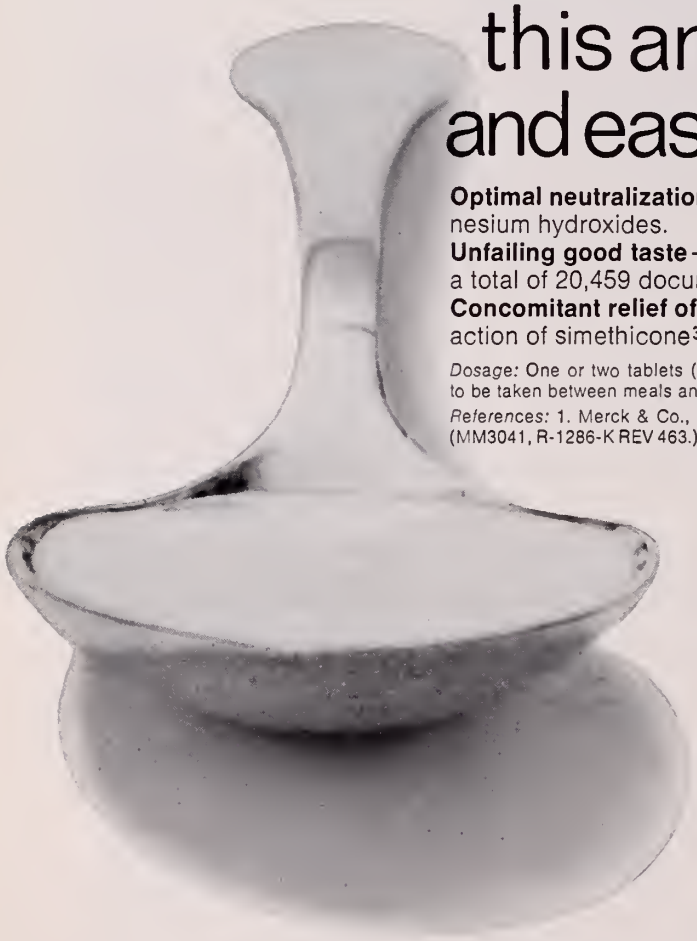
As Oliver Wendell Holmes once said, "What have we to do with time but to fill it up with labor?" And let it be a labor of love for our profession!

Happy Easter!

Jack A. Cleveland

the thousandth teaspoonful

Peptic ulcer patients find the thousandth dose of this antacid as effective and easy-to-take as the first



Optimal neutralization[1] — provided by the combination of aluminum and magnesium hydroxides.

Unfailing good taste — confirmed by 87.5% of 104 patients in one study, after a total of 20,459 documented days on Mylanta Liquid or tablets.[2]

Concomitant relief of G. I. gas distress — provided by the proven antiflatulent action of simethicone[3].

Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth); one or two teaspoons to be taken between meals and at bedtime, or as directed by physician.

References: 1. Merck & Co., Merck Chemical Division: Antacid Literature Survey, Rahway, New Jersey (MM3041, R-1286-K REV 463.) 2. Danhof, I.E., report on file. 3. Hoon, J.R.: Arch. Surg. 93:467 (Sept.) 19

Mylanta

LIQUID/TABLETS

aluminum and magnesium hydroxides *plus* simethicone

Stuart Division/ATLAS CHEMICAL INDUSTRIES, INC./Pasadena, Calif. 91

The first Medihaler was developed for the physician-inventor's own child.

ıe improved model you prescribe today is still made with the same painstaking devotion.

When your patient is in the grip of bronchospasm and reaches for his Medihaler, it must work. Not sometimes. Not most of the time. *Always.*

This is the ideal of perfection which has motivated the constant process of improvement of Riker's Medihaler.

Since its invention in 1956—when a Riker physician developed the Medihaler because of his determination to make better treatment available for his own asthmatic child—Riker has pioneered just about every significant forward step in bronchodilator aerosol therapy.

Riker developed the precision Medihaler valve, which assures the delivery of an automatically measured dose each and every time.

Riker was first to formulate medication in a non-irritating, non-alcoholic vehicle.

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Add to these advantages a quality control system involving 168 physical measurements and chemical tests, plus not one but two test firings on every single unit leaving the plant, and you can readily see why there is no more dependable relief for bronchospasm than your prescription for Duo-Medihaler or Medihaler-Iso.

Please see next page for complete prescribing information.

Medihaler-Iso®
(isoproterenol sulfate)



Duo-Medihaler®
isoproterenol HCl (4mg./cc.)
phenylephrine bitartrate (6mg./cc.)

Riker Laboratories, Northridge, California 91324
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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

Caution: Federal law prohibits dispensing without prescription.

Riker Laboratories, Div. Rexall Drug & Chemical Co., Northridge, Calif. 91324

Milpath®

'MILPATH'-400: tridihexethyl chloride 25 mg. + meprobamate 400 mg.
'MILPATH'-200: tridihexethyl chloride 25 mg. + meprobamate 200 mg.

Usual Adult Dosage: 1 *'Milpath'-400* tablet, 3 times a day at mealtimes and 2 at bedtime. For greater anticholinergic effect, 2 *'Milpath'-200* tablets, 3 times a day at mealtimes and 2 at bedtime. Doses of meprobamate above 2400 mg. daily not recommended.

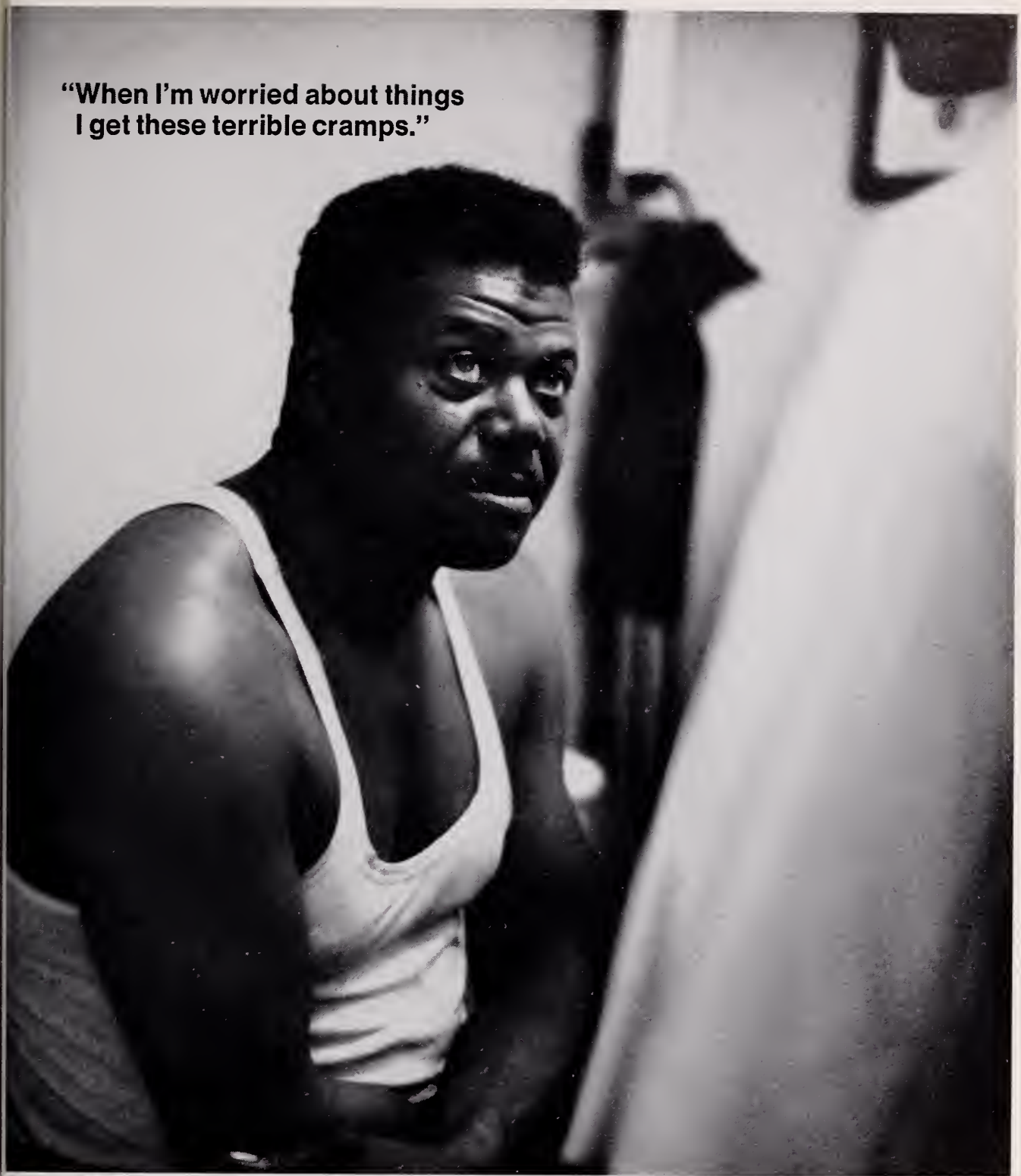
Contraindications: *Tridihexethyl chloride:* Urinary bladder-neck obstructions, e.g., prostatic obstruction due to hypertrophy; pyloric obstructions because of reduced motility and tonus; organic cardiospasm (megaesophagus); glaucoma; possibly in stenosing gastric or duodenal ulcers with significant gastric retention. *Meprobamate:* Previous allergic or idiosyncratic reactions to meprobamate.

Precautions: *Tridihexethyl chloride:* Use cautiously in elderly males (possible prostatic hypertrophy). *Meprobamate:* Carefully supervise dose and amounts prescribed. Consider possible dependence or habituation (reported occasionally after excessive use), particularly in severe psychoneurotics, alcoholics, ex-addicts. Withdraw gradually (1 or 2 weeks) after excessive dosage for weeks or months to avoid recurrence of preexisting symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching; rarely, epileptiform seizures, more likely in those with CNS damage or latent convulsive disorders). If drowsiness or visual disturbance occurs, reduce dose and advise against activity requiring alertness (driving, machinery operation). Effects of excess alcohol may be increased. Grand mal seizures possible in persons with both petit and grand mal. Prescribe cautiously in small amounts to patients with suicidal tendencies. Prescribe with caution to patients with known sensitivity to compounds of similar chemical structure, e.g., carisoprodol.

Side Effects: The following side effects of components may occur with 'Milpath'. *Tridihexethyl chloride:* Severe effects rare on recommended dosage. Anticholinergic effects: dry mouth (fairly frequent at oral doses of 100 mg.), constipation or "bloated" feeling. Possible: tachycardia, dilation of pupils, increased ocular tension, weakness, nausea, vomiting, headache, drowsiness, urinary hesitancy or retention, dizziness. *Meprobamate:* Drowsiness, sometimes with ataxia, usually controlled by decreasing dosage, occasionally with aid of central stimulants (e.g., amphetamine). Rarely, allergic or idiosyncratic reactions (usually after 1-4 doses); in mild form: itchy, urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever, transient leukopenia, and 1 fatal bullous dermatitis (after meprobamate and prednisolone) reported. More severe, very rare hypersensitivity: fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal), anuria, anaphylaxis, stomatitis and proctitis. Treat symptomatically (e.g., epinephrine, antihistamines, possibly hydrocortisone); stop and do not restart the drug. Isolated agranulocytosis, thrombocytopenic purpura, 1 fatal aplastic anemia reported, but only in presence of known toxic drugs; porphyric symptoms reported but relationship not established. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation reported by 1 observer. Fixed drug eruption with meprobamate and cross reaction to carisoprodol reported. Suicidal attempts may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Excessive dosage has led rapidly to sleep, then reduction of vital signs to basal levels. Empty stomach, and if respiration becomes very shallow and slow, cautiously give CNS stimulants (e.g., caffeine, pentylenetetrazol, amphetamine); also pressor amines if indicated.

Before prescribing, consult package circular.

WALLACE PHARMACEUTICALS/Cranbury, N.J.



To calm the patient and curb his pain

helps relieve cramping G.I. pain by reducing spasm and excess secretion / helps allay the anxiety-tension that precipitates, aggravates, or results from G.I. distress

MILPATH®

(tridihexethyl chloride + meprobamate)

WALLACE PHARMACEUTICALS / Cranbury, N. J. 08512

See adjacent page for brief summary of prescribing information.

a broad-spectrum antibiotic for the diabetic:

threat or therapy?



Disordered metabolism makes her prone to bacterial infection —and to moniliasis.

When she needs tetracycline, she may also need protection against the threat of fungal overgrowth. And Tetrex-F can provide both.

Each capsule contains 250 mg. of tetracycline phosphate complex to control sensitive bacterial pathogens...and nystatin, 250,000 units, as a precautionary measure against troublesome vaginitis, proctitis or other monilial infections. However, superinfection with other, nonsusceptible organisms may occur.

Tetrex-F®
(tetracycline phosphate complex-nystatin)

PRESCRIBING INFORMATION: Tet-F. 5—2/23/67. For complete information consult Official Package Circular.
Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections.
Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.
For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

this ulcer did not heal...until its surface was cleared of dead tissue and debris



FIRST APPLICATION
ELASE Ointment is applied to a deep ulceration of a finger.

EIGHTEEN DAYS LATER
Healing has progressed rapidly without interruption or interference from any accumulated purulence or necrotic tissue. Greatly reduced size of lesion and minimal scar tissue indicate quality and vigor of healing which is almost complete.



to aid in debridement to facilitate healing in chronic cutaneous ulcers...

Elase® Ointment

(fibrinolysin and desoxyribonuclease, combined, [bovine] ointment)

PARKE-DAVIS

By helping to remove dead tissue and debris from the ulcer's surface, ELASE Ointment creates a better environment for the elimination of infection, for healthy granulation...*for healing.* Its lytic enzymes effectively break down DNA in dead leukocytes and other debris...the fibrin in blood clots, serum, and purulent exudates...and the denatured proteins in necrotic tissue. Protein elements of *living* tissue are relatively unaffected. ELASE Ointment is indicated in stasis ulcers and in other infected or inflamed ulcers caused by circulatory disturbances. In cases requiring skin grafting, it is used preoperatively for debridement. For ambulatory patients debridement with ELASE Ointment is a convenient therapy and a regimen likely to be followed. *Precautions:* Observe usual precautions against allergic reactions, particularly in persons with a history of sensitivity to materials of bovine origin or to mercury compounds. *Adverse Reactions:* Side effects attributable to the enzymes have not been a problem at the dose and for the indications recommended. *Discussion:* Successful use of enzymatic debridement depends on several factors: (1) dense, dry eschar, if present, should be removed surgically before enzymatic debridement is attempted; (2) the enzyme must be in constant contact with the substrate; (3) accumulated necrotic debris must be periodically removed; (4) the enzyme must be replenished at least once daily; and (5) secondary closure or skin grafting must be employed as soon as possible after optimal debridement has been attained. It is further essential that wound-dressing techniques be performed carefully under aseptic conditions and that appropriate systemically acting antibiotics be administered concomitantly if, in the opinion of the physician, they are indicated. *Available:* ELASE Ointment is supplied in 30-Gm. tubes containing 30 units (Loomis) of fibrinolysin and 20,000 units of desoxyribonuclease with 0.12 mg. thimerosal (mercury derivative); and in 10-Gm. tubes containing 10 units of fibrinolysin and 6,666 units of desoxyribonuclease with 0.04 mg. thimerosal. ELASE Ointment has a special base of liquid petrolatum and polyethylene; contains sodium chloride and sucrose used during manufacture; is stable at room temperature through the expiration date stated on the package.

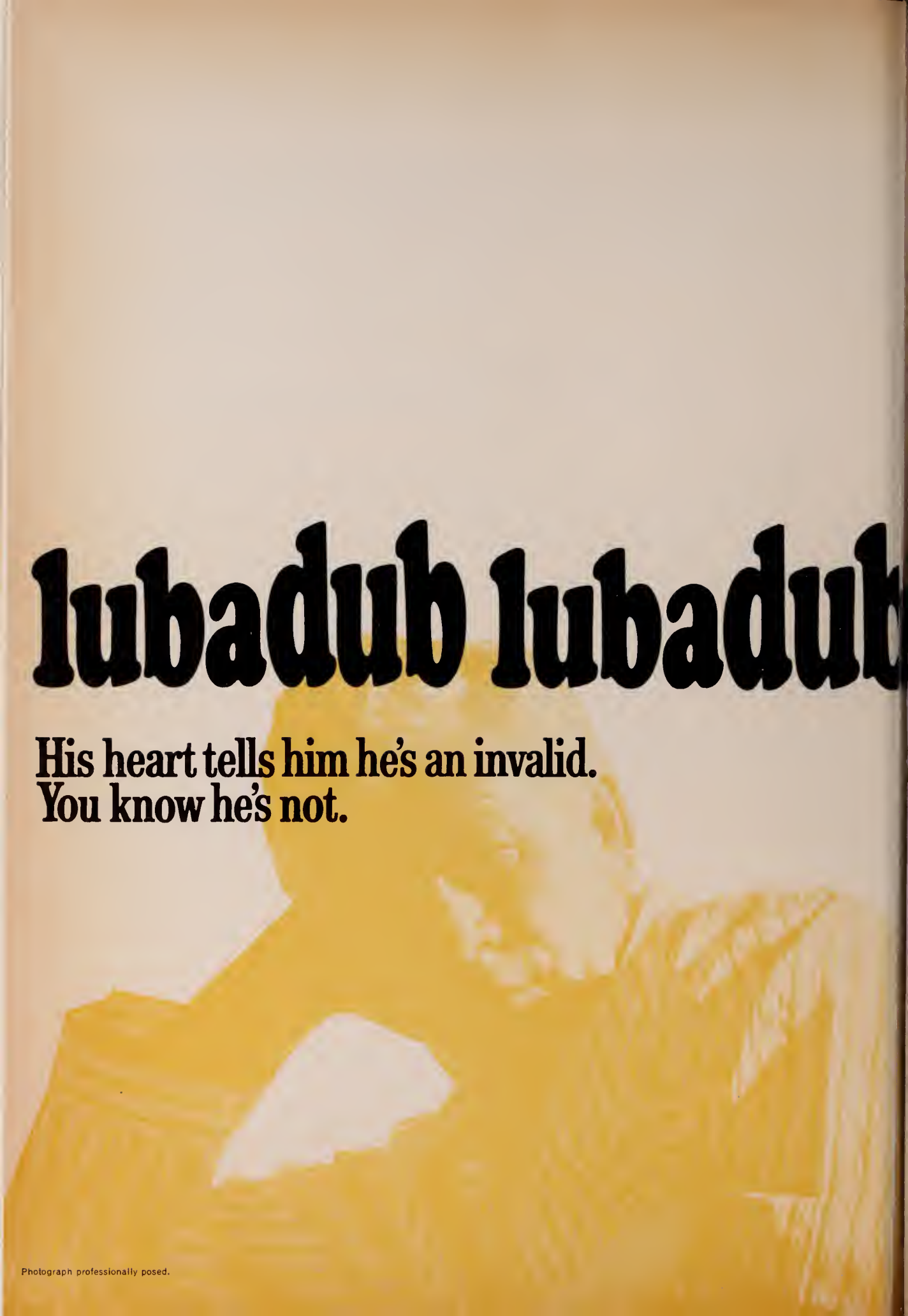
Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

48168

lubadub lubadub

His heart tells him he's an invalid.
You know he's not.



Photograph professionally posed.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

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Anxiety is expected in the cardiovascular patient. A little may even be desirable.

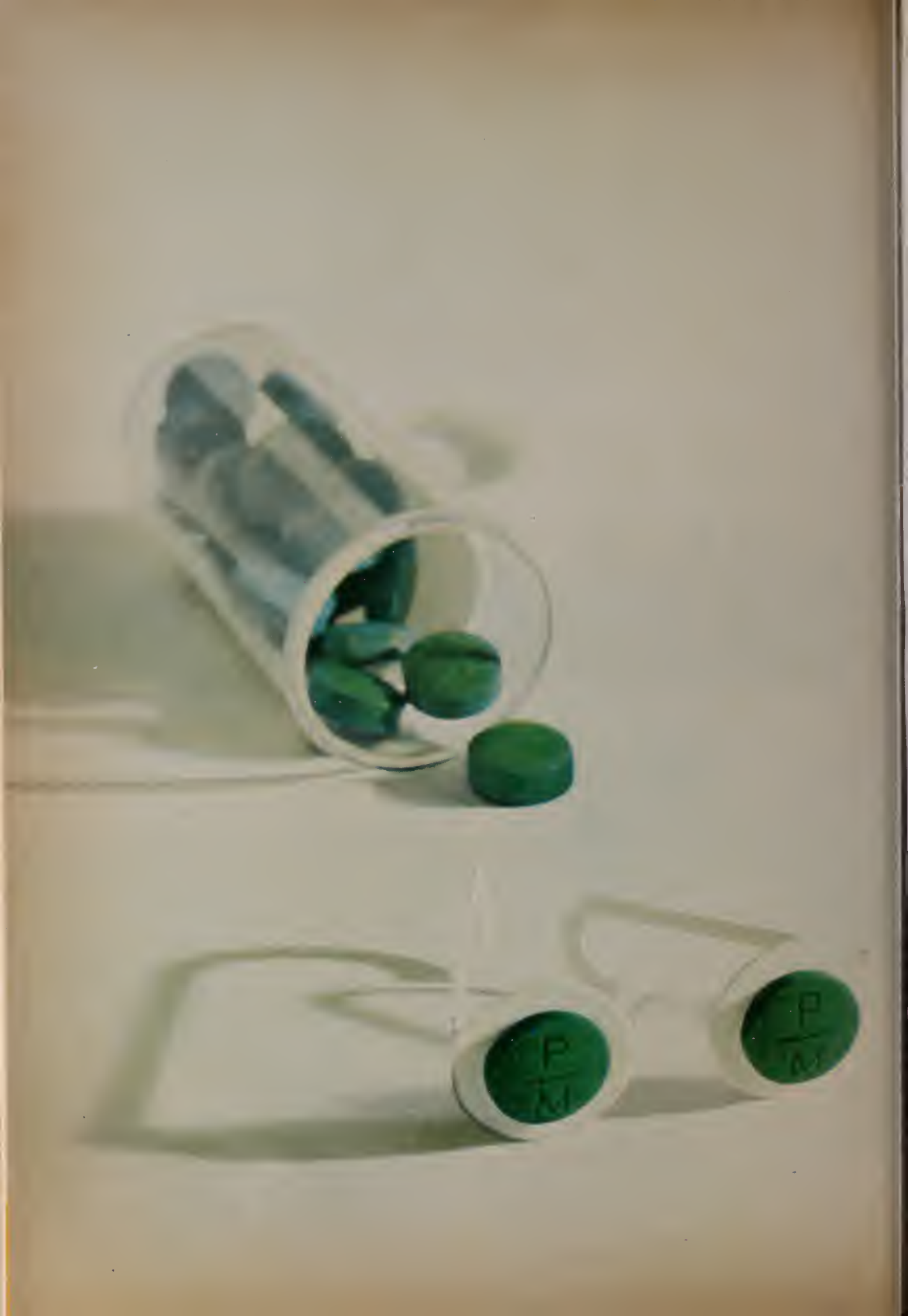
But when anxiety is exaggerated . . . when it interferes with sleep . . . when it aggravates cardiovascular symptoms, your help may be needed.

Naturally, you'll want to reassure the patient.

And perhaps prescribe Equanil (meprobamate) as adjunctive therapy. It helps relieve anxiety and tension specifically, yet gently.

Almost 15 years' use has shown that Equanil is usually well tolerated as well as effective. Side effects are generally limited to transient drowsiness; serious, therapy-interrupting side effects are rare.

Equanil®
(meprobamate) Wyeth®


P
M
P
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A little sunshine for summer cold and allergy sufferers.

histine LP can brighten things in
ry for your summer cold and
gy patients.
e continuous-release, deconges-
ablets contain a vasoconstrictor-
istamine formulation that goes to
promptly and usually provides
tive relief even in those cases
sal congestion caused by repeated
gic episodes.
convenient twice-a-day dosage
with Novahistine LP lets most patients enjoy relief all day and all night.
Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

PITMAN-MOORE Division of
The Dow Chemical Company,
Indianapolis, Indiana.

Novahistine®
LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

DOW



Darvon®
Compound-65

Each Pulvule® contains 65 mg. propoxyphene hydrochloride, 227 mg. aspirin, 162 mg. phenacetin, and 32.4 mg. caffeine.

Lilly

Additional information available upon request.
Eli Lilly and Company
Indianapolis, Indiana 46206.

900252

Florida Medical | scientific

Problems of the Military Retiree

Benjamin Ogburn, M.D., Robert Bellino, M.D., Robert Williams, M.D., and Richard Gordon, M.D.

The telephone wakes the physician at three o'clock Sunday morning. It is the hospital emergency room. The ambulance had just brought in Henry A, one of his patients, a 42-year-old former chief petty officer, comatose, with an alcoholic odor on his breath. The patient's wife returning from a late movie had found him sprawled on the living room couch. Unable to rouse him, she called the police. On the carpet lay an empty drug bottle; on its label was the physician's name. Two weeks previously he had prescribed the sedative with which the patient had attempted suicide.

Why would an apparently successful 42-year-old man with three healthy teenage children and an attractive wife want to kill himself? How can such an act be explained in a previously stable, responsible individual with an excellent 23-year record of military service, including combat experience, with a pension and a secure job? Yet such tragedies are commonplace. In the first eight months after opening our 30-bed psychiatric service at Gainesville VA hospital, we admitted 12 military retirees whose emotional disabilities were precipitated by retirement. Lack of beds forced us to refer to other VA hospitals several more recent retirees in need of immediate admission.

Florida physicians will need to cope with an increasingly greater share of the problem of military retirees. Ten per cent of career veterans now settle in Florida and, considering relative state populations, Florida presently absorbs the highest percentage of retirees and their families, higher even than Texas, California and Hawaii—our major competitors.[1]

Moreover, since January, 1967, when medical insurance coverage was offered as an alternative to medical care on military posts, increasingly larger numbers of retired veterans have sought medical care from private physicians. In this paper we shall describe some of the retired veteran's special problems in readjusting to civilian life and how they affect his emotional and physical health.

Case Example

Our patient, the 42-year-old retired chief petty officer admitted to the Gainesville VAH after attempting suicide, had suffered short periods of mild depression for most of his 23 years of service. He also had intermittent peptic ulcer-like symptoms during his military career. Three months before his retirement discharge he underwent a hemigastrectomy.

The patient began to consider retirement three years prior to leaving service. He disliked sea duty and wanted to avoid repeated relocations of his household, especially since his children were in high school. He was ambitious, furthermore, to start a new career while still young enough to advance. Finally, he believed that his retirement pension would provide basic security.

His first job, as a night manager in a meat packing plant, began the day after he left the military. Although in the service he had earned up to $1,000 a month including hazardous duty and subsistence allowances, his pay was now only $500. Very soon he began to drink heavily. He and his wife were both frustrated by the loss of income, prestige and security. Within five months he acceeded to his wife's wish to move to Florida.

Two weeks after arriving in Florida he obtained employment as a service manager at a nearby airport. There he functioned as an efficiency expert and general troubleshooter, work similar to that which he did in the service, but was paid only $80 weekly. After six weeks, however, he had to quit because the business could not support even

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this meager salary. During this period he began to experience dull, precordial chest pains. These symptoms increased in frequency up until his hospitalization.

His next job, driving a dairy delivery truck, lasted only two months. He liked the strenuous nature of the work, but could not stand the lack of intellectual stimulation. He switched to carrying mail where he remained for 15 months. Frustrated by the "inefficiencies" of the Post Office, he had sent in his resignation several days prior to the present hospital admission.

In addition to his civilian career discontent, the patient also was disturbed by lack of love and sexual satisfaction in his marriage. Worry over the family's expenses, which were geared to an income more than twice its present level and resulted in growing indebtedness, contributed heavily to his anxiety and depression. The two sons and daughter added their complaints to those of his wife over losing their old friends, spending money and prestige. Formerly a close-knit family, they became disunited and quarrelsome. The father lost their respect with the decline in his civilian status. Discouraged by continuous job failures, marital disharmony, and inability to provide leadership for his children, the patient developed increasing depression eventually leading to his suicide attempt.

Background of the Military Retiree's Dilemma

Because of the need for a large standing army, many men have accepted careers in the military lasting between 20 and 30 years. Therefore, in contrast to the elderly civilian retiree, the typical retired enlisted man or officer enters civilian life at a relatively young age—in his early 40's—bringing with him a wife and usually two school-age children. The civilian retiree, on the other hand, is about 65 years old. He generally is more financially secure, his children are grown, with jobs and families of their own. He plans a leisurely life or accepts that role through the dictates of civilian society.

Unlike the civilian's, the military retiree's pension alone will not support a family accustomed to certain prestige and standard of living. After 20 years service he receives 50% of his base pay and after 30 years 75%. A chief petty officer with 20 years service, for example, earns about $500 a month base pay and will receive about $250 per month upon retirement.[2] This income will obviously not make retirement a leisurely period for him and his family. He will need a job. Nevertheless, the retired military person is still handicapped because most companies fill administrative and clerical positions by promotion from within the ranks of their own experienced employees.

Many other difficulties interfere with the retiree's integration into the civilian employment pool. Industry looks for younger recruits, not middle-aged ones. Military personnel often lack employment information; isolation from the civilian labor market hinders their obtaining it. Military retirees also find themselves the object of civilian prejudices. Employers sometimes state that the former military man knows only how to rely on force and authority rather than arbitration and negotiation to resolve conflict.[3]

Not accustomed to bargaining for wages, since his salary for many years has been fixed by the government, the retiree may be grossly underpaid. Fellow employees may harbor resentment and treat him as an outsider. Others may resent and envy his receiving retirement income to supplement his salary. He may be disadvantaged further by the fact that civilian industry often places emphasis on individual achievement, whereas the military stressed team and group efforts.[4]

Crises the Retired Military Man Meets

Retirement presents two separate crisis areas for the career serviceman.[5] External conflicts about finances, social position, and where to live may disturb him and his family. The economic difficulties previously described may initially cause the most disruption. Moreover, few professions or occupations throw individuals and families into such close social relationships with their colleagues as does military life. Very quickly the family learns that rank has privileges, provides its social position, and determines its obligations and rewards. By the time of retirement, the military family has come to take for granted advantages which are lost when the father retires. They have incorporated the values of the system to which they have been accustomed for over a fifth of a century. As retirement approaches, the family, as well as the retiree, may feel the impact of the loss of a way of life which proved secure and satisfying.[3]

Geographic settlement after retirement is influenced by several factors: proximity of military posts where commissaries and medical facilities are available, possibilities of employment, and desirability of a climate which permits at least the aura of retirement and leisure. The community where a family decides to live may fulfill many of their expectations; but lack of planning for tax increases, school crises, and the like may bring on worry and confusion.

Purely personal matters account for the second kind of crisis. The sudden loss of prestige and authority can be very damaging to the retiree's pride. Quite often he feels alienated as he loses the sense of belonging which was a major asset of military life.

Although most military men have well-integrated basic personalities, some passive character types are attracted to a life that both caters to dependent needs and also permits direct expression of aggression. Many of these inherently maladjusted types cannot "cut the mustard" in the vernacular of the complicated technological environment of today's military. They are forced into early retirement. The insecure person, whether leaving service voluntarily or against his will, may feel markedly ambivalent as separation becomes imminent. He may consider retirement as a rejection.[6] Even relatively stable persons threatened with loss of career-long military identity and security may feel inadequate to face the largely unknown factors of civilian life.

Military Retirement Syndrome

Several years prior to retirement the military careerist may begin to show signs of anxiety as he realizes he must soon learn a new way of life. Involuntary retirement may cause even greater anxiety. After removing the uniform with its insignia depicting his status, the ex-serviceman is unsure as to what behavior is expected of him. He wants to obtain employment and learn his new role,[4] but during the immediate post-separation period he is often disappointed in employment.[6] Confused and disillusioned, he commonly develops anxiety and/or depression. His decompensation is often complicated by increased alcoholic intake and psychosomatic symptoms. These tend to center around the cardiovascular and gastrointestinal systems. Both officers and enlisted men with previous medical conditions may suffer a physical relapse.[7,8]

The following factors are important in evaluating a retiree's adjustment:

1. His job satisfaction
2. His satisfaction with retirement residence
3. His ability to maintain the family's accustomed standard of living
4. The general happiness of the entire family with retirement

Problems of the Retiree's Family

Civilian family doctors will often question who is the patient when they begin to treat a retiree, as the whole family constellation may exhibit pathology. First of all, the ex-military family is not used to having father around the home. New household patterns must develop to include him. Obviously, the same problems described previously—role confusion, loss of security, feelings of inadequacy—may distress each member of the family. Even if the veteran does not break under the loss of status and downward mobility, his family may contribute to his suffering as they express their resentments. He may lose face with his wife and children. They may cease to respect him or, even worse, come to pity or condemn him.[9] Any family member may develop psychiatric disability under these pressures.

Prevention

Obviously a wide spectrum of character types pursue military service careers, including, as previously noted, many insecure individuals who gravitate toward a structured environment. Nevertheless, most careerists tend to make an adequate adjustment in service. Retirement, however, can be one of life's critical stress periods for well integrated personalities as well as for others not so fortunate. In the study by McNeil and Giffen[1] two-thirds of officer retirees reported that this period was associated with role confusion; one-fourth indicated that they would have welcomed pre-retirement counseling. Although the military services recognize the importance of counseling and one report has recommended that each potential retiree with his family be evaluated at a mental health center,[6] most retirees receive little systematic assistance in the year prior to retirement. Thus, at present here in Florida our military patients often need a service which we physicians must generally try to provide ourselves.

To be effective, a program of pre-retirement counseling should cover most of the following points:

1. Planning for retirement should begin, strange as it may seem, at the time a person decides to make a career in the military. For example, he should be advised to keep some civilian roots—ties to his family of birth, to civilian friends and potential business or employment opportunities. Even if he comes from a broken home, for example, and had no community roots, he should begin to make them, perhaps through his wife's family or through military friends who have already retired and settled down in a successful new civilian job. In this connection, many military personnel, who retire happily without disrupting the even flow of their lives, take their annual leaves year after year in the retirement community of their choice. Thus they provide themselves and their families an opportunity to make friends, discover in advance how

well they and the community mutually are suited for each other, and how much they must re-adapt. We Florida physicians might bear these principles in mind when counseling military patients.

2. These same guidelines apply to the patient's family. His wife and later his children also need to think about friends, schools, clubs and the like. The husband's job concerns must, of course, take precedence, but a frustrated wife or child, particularly a son, can destroy a whole family's peace of mind during readjustment. They too must not allow themselves to become totally dependent upon the military system for their personal and social satisfactions.

3. The careerist with specialized military skills should begin to prepare for civilian opportunities at least several years before leaving the service. He may need to be referred for vocational counseling to either a military or civilian agency. There his interests and aptitudes can be assessed and a program of re-training begun. Recently Project Transition, a new civilian job training program, went into operation at many military bases in this country. It is an outgrowth of President Johnson's 1967 message to Congress on manpower. Subsequently, dozens of major civilian firms have given training for many vocations to over 30,000 retiring servicemen. The Urban League provides a similar service for Negro Vietnam veterans. This program also includes counseling in employment, housing, medical care, and other readjustment problems of the retiree.

4. Persons with a high risk of physical or emotional breakdown after leaving the service should be spotted early. Some military health officers have proposed to do this by means of annual multiphasic screening examinations. The practicing physician, however, can trace the signs of the retirement syndrome in his patients and their families long before they left the service.

Treatment

Obviously good treatment requires early recognition. Suspect the retirement syndrome with every recent military retiree or member of his family seen for most any complaint. Drinking excesses may first come to the attention of law enforcement agencies or to the family physician. The doctor will learn about other changes in behavior or physical complaints. All Florida physicians might keep alert to this disorder since they will encounter increasing numbers of patients as more and more retirees with their families come to live in our state.

If the condition goes unrecognized until psychiatric hospitalization becomes necessary, treatment and rehabilitation may be very difficult. On the other hand, if diagnosed early before severe emotional deterioration sets in, military separation anxiety or depression responds readily to brief psychotherapy.

When the patient's complaints seem to be connected with retirement, gently inquire into his life situation and feelings toward retirement. Most patients welcome an opportunity to talk about their concerns and fears. They benefit from ventilating their feelings to an interested physician. Explain that feelings of confusion and concern are normal with most retirees. This reassurance and occasional friendly supportive discussions of his situation and efforts to cope may be all that are necessary to tide the family over the critical period.

If there seem to be significant family conflicts, or if his wife or child is the patient, a family approach will often be necessary. If the physician himself does not wish to perform this type of counseling, he can call upon other community resources. Most large cities have a family service agency or mental health center which can provide family counseling. In smaller communities, clergymen provide a willing resource. For problems with employment, state vocational agencies and the Veterans Administration offer counseling and retraining.

Finally, always remember in dealing with these problems that most retirees have basically stable personalities. After all, a man with 20 or more years successful service in a demanding career has developed much strength of character and emotional maturity. For this reason we can be optimistic about the benefit of early therapy for the military retirement syndrome.

References

1. McNeil, John S., and Giffen, Martin B.: Social Impact of Military Retirement, Social Case Work 46:203-207, D 65.
2. University of Michigan: Study of Military Retired Pay System and Certain Related Subjects. Report to Committee on Armed Services of United States Senate and Study Committee, Ann Arbor, Mich. University of Michigan Press, 1961.
3. Janowitz, Morris: Professional Soldier, Glencoe, Ill., The Free Press, 1960.
4. McNeil, John S., and Giffen, Martin B.: Military Retirement: Some Basic Observations and Concepts, Aerospace Med. 36:25-29, 1965.
5. Greenbey, Harvey R.: Depression Equivalent in the Pre-Retirement Years "The Old Soldier Syndrome," Milit. Med. 130:251-255, 1965.
6. Gruss, Richard G.: Problems Associated with Retirement from Military Science, Milit. Med. 130:382-385, 1965.
7. McNeil, John S., and Giffen, Martin B.: Military Retirement: The Retirement Syndrome, Am. J. Psychiat. 123:848-854, 1967.
8. Milowe, Irvin D.: Study in Role Diffusion: The Chief and the Sergeant Face Retirement, Ment. Hyg. 48:101-107, 1964.
9. Bernard, J.: Social Problems at Mid Century, New York, Dryden Press, 1957.

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Cryptococcal Meningitis

Report of Case

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Cryptococcal meningitis usually is fatal. It is caused by Cryptococcus neoformans, an encapsulated yeast-like organism with a special predilection for the central nervous system, but the skin and lungs may be affected. Cryptococci resembling C. neoformans have been isolated from soil, pigeon droppings, surface of fruit, and the skin and intestinal tract of normal man. The infection may be endogenous or exogenous in origin.[1] It has not been found contagious.

The disease is sufficiently unusual in Florida that report of the successful treatment of a case appears worthwhile.

Report of Case

The patient, a 69-year-old Negro female, was seen on Feb. 2, 1968 with principal complaints of severe pain in the back and head, anorexia, mild cough, chills and fever, and slight confusion. The temperature was 100 F. Prior to onset of illness, she stated her health had been excellent except for a supravaginal hysterectomy in 1920. She had been seen by another physician on January 12 for symptoms which appeared due to influenza. Despite administration of Tetracycline, antitussives and antidynes, there had been no improvement. Further treatment with Panalba, Erythrocin, antidynes and bed rest produced little or no results; the symptoms and signs became worse over the next seven days.

She was admitted to a local hospital on February 10. The weakness, cough, fever, headaches, mental confusion and personality change had persisted over the previous four weeks. Upon admission, the patient appeared drowsy, weak, fairly well oriented but in no acute distress. She complained of pain about the left eye and in the lower back and the inability to see well.

Except for tenderness in the left periorbital area, the head and neck showed no evidence of localized pathology or symptoms. Despite the cough, the lungs were clear to auscultation and percussion. Examination of the heart revealed regular sinus rhythm and no murmurs or signs of enlargement. The blood pressure was 122/74 and the pulse rate 80. The abdomen was soft, without tenderness, and no organ enlargement could be ascertained. Examination of the extremities revealed weakness but no paralysis, spasticity, edema, clubbing or cyanosis.

The admitting diagnosis was influenzal pneumonia with toxic manifestations. The temperature was 99 F. but rose to 103 F. within four hours. The chest x-ray showed no abnormalities. Blood studies revealed the following: hemoglobin 10.8 Gm.; red blood cell count 3,850,000; white blood cell count 6,500 with 2 band forms, 77 segmented forms, 19 lymphocytes and 2 monocytes; icteric index 6.8 units; serum bilirubin direct 0.1 mg.%, total 0.3 mg.%; cholesterol 223 mg.%, and cephalin flocculation 4+. Initial urinalysis was within normal limits except for an increase in acetone. Febrile agglutination studies as well as blood and urine cultures were normal.

At the end of the fourth hospital day, no localizing cause was apparent for the continuing septic temperature. The patient appeared more confused and continued to complain of pain about the left eye and the left side of the face. Examination of spinal fluid obtained February 14 showed haziness, 88 red blood cells per cubic millimeter, 252 white blood cells per cubic millimeter, 95% lymphocytes and 5% monocytes. Since meningitis was indicated, she was placed in isolation immediately.

Therapy for influenzal meningitis was initiated promptly. This consisted of Chloromycetin intravenously and penicillin and Streptomycin intramuscularly. On February 15 she became alternately restless and lethargic and next day the extent of anorexia and listlessness made nasogastric feeding necessary.

On February 16 the preliminary laboratory report indicated the causative organism to be C. neoformans. Immediate measures were planned to combat the formidable disease,[2] Cryptococcal meningitis, before the organism could be grown on Sabouraud's medium; however, following consultation, it was decided to withhold specific therapy until positive cultures were reported. Mycology of the organism revealed that colonies usually appeared within seven to 20 days.[3]

On February 17, intravenous sulfadiazine therapy was started. This drug had been helpful in controlling some fungal infections of the meninges such as South American blastomycosis.[4] The other antibiotics were continued.

C. neoformans was isolated from the spinal fluid on February 20, and the patient was started on 14 mg. amphotericin B in 140 cc. of 5% glucose in water intravenously. Due to a shaking chill, the medication had to be discontinued before half had been administered. Next day, a reduced dose of amphotericin B in 70 cc. of glucose in water resulted in only a small chill, and on February 22 she tolerated 14 mg. with only a mild reaction. The dosage was increased to 27.5 mg. in 275 cc. of 5% glucose in water on February 23. This level was maintained until March 1.

During the first 11 days of amphotericin B therapy, the blood urea nitrogen remained normal, ranging from 6 mg.% to 12 mg.%. The hemoglobin dropped to 9.4 mg. on February 29 but electrolytes were within the normal range. Cultures of spinal fluid obtained on February 20 repeatedly showed growths of C. neoformans.

The septic temperature continued and the patient appeared to respond very slowly to intravenous amphotericin B. Due to marked osteoarthritis of the vertebrae incidental to age, obtaining spinal fluid was rather difficult. For this reason, intrathecal administration was not considered seriously.

Following consultation, the patient was started on 4 mg. Decadron intramuscularly three times a day on February 29. It was believed that this corticosteroid

might provide symptomatic relief, and on March 1 the temperature approached the normal range. Next day she appeared much improved, talking with more lucidity, eating better, and was able to sit on the side of the bed. Some edema with tenderness in the left forearm developed on March 3, but this responded to hot compresses. The blood urea nitrogen was 18 mg.% on March 4, but the hemoglobin had dropped to 7.6 mg. with a red blood cell count of 2,860,000. Cause of the anemia was not apparent: there had been no melena or hematemesis. On March 8 she was given two units of packed cells, and next day the dosage of amphotericin B was increased to 50 mg.% in 500 cc. of 5% glucose in water daily.

At this time the patient was tolerating food well; however, on March 11, she had a mild attack of nausea and vomiting. The icteric index was found to be elevated slightly to 13 units but the urea nitrogen was only 19 mg.%. On March 14 a check of blood electrolytes revealed the sodium ions to be slightly elevated and potassium ions markedly decreased to 1.9 mg.%. Amphotericin B was discontinued and corrective therapy for the hypokalemia was initiated by infusion.

Amphotericin B was restarted on March 17 at the level of 50 mg. daily, and the patient showed the first rise in temperature for more than a week. Spinal fluid was obtained on March 20 and all cultures were reported negative for any growth of the fungus.

On March 21, thrombophlebitis developed in the lower portion of both legs due to infusion of amphotericin B through the veins. Considerable relief was provided by Chymoral-100 and Butazolidin tablets 100 mg. four times daily. Amphotericin B was discontinued for the period March 20-25. She was taking regular diet with no difficulty. On March 29 the hemoglobin was 9.4 Gm. and she was given a unit of packed cells two days later. The blood urea nitrogen rose to 30 mg.% and infusions of amphotericin B were discontinued again.

Since the patient was quite anxious to leave the hospital, cultures of urine and blood were set up for April 1 and she was permitted to go home but advised to continue the anti-thrombophlebitis medication. No C. neoformans colonies were noted on urine, blood or spinal fluid cultures.

The patient's condition has been most satisfactory. When last seen on September 18, she complained of slight soreness in the ankles which showed minimal signs of thrombophlebitis. She was eating well, able to get about at will, cheerful, lucid and very grateful for recovery, which hopefully is permanent. On October 14, there had been no report of recurrence of the disease.

Comment

This case illustrates the difficulty of the clinical diagnosis of Cryptococcal meningitis. At no time during the course of the illness were there any localized neurological deficits or signs; therefore, this disease should be considered when even a remote possibility of its existence is present. It should be remembered that Cryptococcal meningitis is frequently a complication of debilitating illnesses, particularly lymphoma, and a diligent search should be made for predisposing factors.

Repeated questioning of this patient and her family revealed no clues as to the possible entry of the organism. She appeared to have fully recovered after intravenous administration of the specific drug. The only serious side effects were anemia, transient azotemia and hypokalemia, all of which were easily overcome. Steroids were a helpful adjunct in treatment of this fungus caused meningitis; however, it is not suggested that these drugs be used in conjunction with amphotericin B therapy in all patients.

The drug of choice is amphotericin B, an antifungal antibiotic derived from Streptomyces nodosus, marketed as Fungizone (Squibb).[3] It must be administered intravenously in 5% glucose in water, preferably with the pH of the solution near 5.0. The drug has many side effects, some potentially dangerous, the most commonly noted being nausea, vomiting, azotemia, chills, fever, localized thrombophlebitis, anemia, melena, and occasionally hepatic dysfunction. It has to be administered by micro-drip over a period of six hours. The recommended concentration is 0.1 mg./cc. (1 mg. 10 cc.). The suggested starting dosage is 0.25 mg./kg. body weight: it may be increased gradually to a maximum of 1.5 mg./kg. Prolonged therapy is usually necessary and the dosage must be adjusted to the specific needs of each patient.

Many clinicians recommend that amphotericin B be given intrathecally if the intravenous response is unsatisfactory.[1,5] In intrathecal administration, however, there are the dangers of bacterial contamination and overdosage, as well as temporary paralysis of the urinary bladder and legs, and arachnoiditis.

Summary

Successful treatment of Cryptococcal meningitis involving the central nervous system is reported in a patient with no known prior debilitating illness. Notes on the therapy for this frequently fatal disease are included. Since clinical diagnosis is difficult, the suggestion is made that the disease be considered when there is a remote possibility of its existence in the patient.

Charles L. Rast Jr., M.D., and Gordon J. Gilbert, M.D., both of St. Petersburg, served as consultants at various times in the treatment of this patient and their assistance is gratefully acknowledged.

References

1. Braude, Abraham I.: Cryptococcosis, Principles of Internal Medicine, Harrison et al., McGraw-Hill, Vol. II, pp. 1053-1054.
2. Butler, W. T.; Alling, O. W., and Utz, J. P.: Diagnostic and Prognostic Value in Clinical and Laboratory Findings in Cryptococcal Meningitis, New England J. Med. 270 (June) 1964.
3. Hillier, W. F. Jr., and Shankin, J. R.: Cryptococcus Meningitis, West Virginia M. J. 61:733 (June) 1965.
4. Braude, Abraham I.: South American Blastomycosis, Principles of Internal Medicine, Harrison et al., McGraw-Hill, Vol. II, pp. 1067.
5. Tami, M.: Cryptococcus Meningitis: Case Report, Rhode Island M. J. 49:604 (Oct.) 1966.

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The Diagnosis and Treatment of Children With Sexual Ambiguity

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Sexual assignment of the newborn infant is usually obvious at the time of delivery. Occasionally, however, ambiguity of the external genitalia can be clarified only after thorough and systematic evaluation of the individual factors which determine sexual differentiation. It is essential that this review be expeditious and that treatment be instituted promptly. Delay in proper sexual assignment or correction of contradictory sexual characteristics may result in irreparable psychological and physical handicaps.

The multiple facets of this problem lend themselves ideally to a team approach in which the specialized talents of the surgeon, pediatrician, gynecological endocrinologist, geneticist and psychiatrist are incorporated in a program for correction and support of the individual patient. The value of this philosophy is exemplified by a rare case of true hermaphroditism which has been treated successfully on the pediatric surgical service of the University of Florida.

Case Presentation

This 3½-year-old colored female was admitted to W. A. Shands Teaching Hospital Dec. 10, 1967 for evaluation of clitoral hypertrophy which had been noted since birth. The patient was the product of a full-term pregnancy and delivery with a birth weight of 4.3 kg. There was no history of maternal exposure to drugs or hormones during the pregnancy except for a brief course of antibiotic treatment of a urinary tract infection during the first few weeks of gestation and intermittent diuretic treatment during the last trimester of pregnancy. There was no indication of virilization in the mother either during or following the pregnancy. At delivery, the newborn was immediately noted to have a prominent phallus-like clitoris, measuring between 1 and 2 cm. in length. No abnormal abdominal or inguinal masses could be palpated. The labial folds were partially fused posteriorly, forming a common perineal opening which suggested a urogenital sinus. No gonads could be palpated in the labial folds. All other aspects of the infant's examination were within normal limits with no further suggestion of virilization or precocious development.

Subsequent studies performed during infancy confirmed that the patient was a "chromosomal female." There was no evidence of abnormalities in fluid and electrolyte balance and repeated assays of urinary 17-ketosteroids, 17-hydroxycorticosteroids and pregnanetriol excretion were within normal limits. Skeletal x-rays at this time were interpreted as showing a moderate increase in bone age as compared to the patient's chronological age. A voiding cystogram and intravenous pyelogram appeared normal. A vaginogram excluded the possibility of a common urogenital sinus by demonstrating the presence of a hypoplastic vagina behind the partially fused labia with an identifiable urethra, uterus, and genital tract.

Subsequent growth and development of the patient remained within normal limits, with the clitoris enlarging relative to body growth. No further evidence of virilization appeared. The child was reared as a female and adapted well to this assigned gender.

Physical examination at the time of the present hospital admission revealed a well-developed, well-nourished child with no external abnormalities except as noted in the genital area. No unusual masses could be distinguished in the abdomen. A small, easily reducible, left indirect inguinal hernia could be demonstrated but no gonads could be palpated. The clitoris was obviously enlarged, and the vagina was evident (Fig. 1). No urethral orifice could be visualized without relying on instrumentation. The prepubertal labia appeared normal except for posterior fusion of the labia minora. No abnormalities were evident on rectal examination. Repeat urine assays demonstrated 0.4 mg. of 17-ketosteroids and 1.4 mg. of 17-hydroxycorticosteroids excreted per 24 hours. Buccal smear was sex chromatin positive, and chromosome analysis confirmed a normal female karyotype-46XX. Repeat skeletal x-ray survey at this time failed to confirm the discrepancy between skeletal and chronological age which had been suggested by earlier studies.

After completion of this evaluation, a left inguinal herniorrhaphy and exploratory laparotomy was undertaken. A normal uterus and fallopian tubes were identified, but the left ovary was grossly abnormal in appearance with soft, fleshy colored tissue comprising the upper pole (Fig. 2). Biopsy of this segment confirmed the presence of testicular tissue. The entire left ovary was then excised with preservation of the left fallopian tube. Subsequent histologic examination confirmed the presence of both ovarian as well as testicular components. The right ovary appeared grossly normal and biopsy confirmed the existence of normal ovarian tissue. A left inguinal herniorrhaphy was then carried out for an indirect hernia. No right inguinal hernia was demonstrable. The operative findings confirmed the correctness of female sexual assignment and supported a decision to perform total clitorectomy.

The postoperative convalescence was uncomplicated, and the child has exhibited no physical or psychological problems to date.

Discussion

Factors influencing sexual differentiation are listed by Van Wyk and Grumbach as follows:[1]

1. Chromosomal Sex and Sex Chromatin
2. Gonadal Sex Differentiation
3. Differentiation of Genital Ducts
4. Differentiation of External Genitalia
5. Hormonal Sex Differentiation
6. Psychosexual Differentiation (Gender Role).

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Correct sexual assignment can be achieved only after a systematic evaluation and correlation of each of these individual factors.

1. Chromosomal Sex: The chromosomal sex of the present case was 46XX with the buccal smear showing more than 25% of cells chromatin positive. This finding agrees with that of Jones and his associates who noted an XX karyotype in 24 of 29 cases of hermaphroditism.[2] The presence of testicular tissue in such cases questions the observation of Grumbach that the short arm of the Y chromosome specifically influences testicular development.[3] An explanation for this contradiction may involve the presence of an undetected mosaicism with an XY cell line.

2. Gonadal Sex Differentiation: Cases of hermaphroditism have been classified by Jones according to their gonadal histology.[4]



Fig. 1. — The presence of a prominent, phallus-like clitoris prompted an evaluation of this patient.



Fig. 2. — The adnexal structures as they appeared at laparotomy. The forceps at the right point to a bilobular ovary, the upper pole of which was composed of soft, fleshy tissue containing testicular elements. The forceps at the left point to an ovary which was normal by both gross and histologic examination.

1. Ovary: Testes
2. Ovotestis: Ovotestis
3. Ovary: Ovotestis
4. Ovotestis: Testis
5. Ovary testis: 0

Utilizing this classification, the present patient is assigned to category 3, since a right ovary and a left ovotestis were identified. It is noteworthy that the left ovotestis was associated with a left inguinal hernia. Testicular tissue is present in approximately one of every 120 females undergoing inguinal herniorrhaphy and the existence of a hernia in the present case emphasized the importance of exploratory laparotomy for visualization and biopsy of the gonads. It is relevant that 80% of patients in categories 1, 2, 4, and 5 are reared as males while only 50% of patients in category 3 are so reared. Prior sexual assignment, therefore, may provide an additional clue as to gonadal histology.

3. Differentiation of Genital Ducts: According to the work of Jost, the fetal testis plays a decisive role in determining the development of the genital duct system.[5] The presence of testes results in mullerian ductal involution and wolffian development. Under normal circumstances, this testicular influence appears to be unilateral in nature. Systemic administration of androgen to the developing fetus fails to alter ductal development. In true hermaphroditism, however, the local mullerian inhibitory effect of the testis may be absent, since Merrill and Ramsey's review of 59 cases revealed an oviduct to be associated with ipsilateral testicular tissue in 29 instances.[6] According to Jones, complete or partial mullerian inhibition is best expressed when testicular tissue is present bilaterally.[4] Since the testicular tissue was localized to the left side in the present case, the mullerian system was able to develop with little or no inhibition into a normal appearing uterus and oviducts.

4. Differentiation of External Genitalia: Although external genitalia have a tendency to feminize unless subjected to androgenic stimulation early in fetal life, clitoral hypertrophy may ensue any time during or following gestation if androgenic influence is exerted from fetal or maternal sources. This was confirmed by Wilkens in a review of 101 cases of nonadrenal virilization, in which 91 were associated with maternal hormonal therapy.[7] The virilization associated with hormonal therapy resembles that observed in the

present case, i.e., clitoral hypertrophy and varying degrees of labial fusion. On the other hand, the mullerian ductal system appears to develop independently of any influence exerted by maternal or fetal androgens. The clitoral hypertrophy and labial fusion evident in the case under discussion was so extensive as to resemble a urogenital sinus. Vaginogram, however, did define a normal urethra and substantiated the presence of a vagina behind the fused labia. A history of maternal hormonal therapy should be carefully sought in any case of ambiguity of the external genitalia. In the present instance, there was no such history.

5. Hormonal Sex Differentiation: A contradictory hormonal environment may also stem from either the maternal or fetal gonad, or adrenal gland. There have been no reported instances of virilizing ovarian neoplasms in children under 30 months of age. Rarely, the presence of an ovarian tumor in the pregnant mother results in a contradictory hormonal environment for a female fetus with virilization of the external genitalia. A case of virilizing luteoma has been reported recently by Divino and Hoskins who reviewed 27 additional cases of maternal virilizing ovarian tumors in association with pregnancy.[8] Four of nine female infants resulting from such pregnancies demonstrated signs of virilization.

The adrenal gland may provide an additional source for contradictory hormonal environment. The adrenal, like the gonad, has a capacity to secrete both androgen and estrogen. Approximately 50% of all infants born with ambiguous genitalia result from a virilizing adrenogenital syndrome. It is beyond the scope of the present report to list all forms of enzymatic defects, but almost all cases of congenital adrenogenital syndrome result in impaired cortisol formation and excessive androgen production. Occasionally, the infant's life is jeopardized by excessive salt loss. Urine studies in such cases reveal an excess of 17-ketosteroids and/or pregnanetriol. Excess androgen production during fetal life leads to virilization of the external genitalia in female infants and precocious sexual development in male infants. In the case under discussion, the initial diagnosis was adrenogenital syndrome and the patient was observed closely for evidence of electrolyte imbalance. Repeated studies of the urine, however, confirmed normal levels for both 17-ketosteroids and pregnanetriol, thereby rendering a diagnosis of adrenogenital syndrome highly unlikely.

6. Psychosexual Differentiation: When sexual assignment has been clarified by the approach as outlined, attention must be directed toward correction of any existing contradictory factors. Every effort should then be made to convince the patient and the parents of the correctness of the sexual assignment. The ultimate therapeutic goal for each patient is to allow normal marital relationship. It is desirable that sexual assignment be established by two years of age and corrective surgery completed by four years of age in order to minimize psychological trauma for the patient and family. Careful discussion of the problem with the parents and counseling by a child psychiatrist aids in avoiding or minimizing future psychological problems. Ideally, the present case should have undergone definitive therapy prior to four years of age, but with careful counseling, a good psychological adjustment appears to have been achieved. Although further vaginal plastic surgery may be required after puberty, there is a good probability that this child will develop into a normal adult female with the capability to conceive.

Summary

A rare case of true hermaphroditism is presented. The factors governing normal sexual differentiation are reviewed, and their relationship to the successful resolution of this problem is discussed. Early diagnosis and corrective therapy of such cases is imperative and is enhanced by a team approach which utilizes the individual talents of the pediatrician, psychiatrist, gynecological endocrinologist, geneticist, and surgeon.

Acknowledgment

The authors would like to express their appreciation to Dr. A. F. Stratton of Cocoa for the privilege of participating in the care of this patient.

References

1. Van Wyk, J. J. and Grumbach, M. M.: Disorders of Sex Differentiation; Williams Text of Endocrinology, Philadelphia, W. B. Saunders Co., 1968.
2. Jones, H. W.; Ferguson-Smith, M. A., and Hellar, R. H.: Pathologic and Cytogenetic findings in True Hermaphroditism, Obst. & Gynec. 25:435, 1965.
3. Grumbach, M. M.: Biologic Basis of Pediatric Practice. New York, McGraw-Hill, Inc., 1967.
4. Jones, H. W. Jr. and Scott, W. W.: Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, Baltimore, Williams & Wilkins Co., 1958.
5. Jost, A.: Embryonic Sexual Differentiation in Hermaphroditism, Genital Anomalies and Related Endocrine Disorders, Baltimore, Williams & Wilkins Co., 1958, p. 15.
6. Merrill, J. A. and Ramsey, J. E.: True Hermaphroditism, Obst. & Gynec. 22:505, 1967.
7. Wilkens, L.: Masculinization of Female Fetuses Due to Use of Orally Given Progestins, J.A.M.A. 172:1028, 1960.
8. Divino, L. E. and Hoskins, B. L.: Masculinization in Pregnancy, Obst. & Gynec. 28:842, 1966.

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Inborn Errors in Cortisol and Aldosterone Biosynthesis

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The newborn with ambiguous genitalia represents one of the earliest diagnostic problems which the pediatrician faces. The reasons for the abnormality are multiple, and the diagnosis of the true sex and the underlying condition leading to the abnormality should not be delayed. We will limit our discussion to conditions resulting from abnormal adrenal metabolism.

The newborn with congenital adrenal hyperplasia is usually symptom free at the time of birth except for abnormalities of the external genitalia. In females these abnormalities are obvious and consist mainly of clitoral hypertrophy and fusion of the labioscrotal folds varying from minimal in degree to complete fusion of the penile urethra. In the male the abnormalities are less evident and consist mainly in increased pigmentation of the penis and scrotum. Exceptions to this are males with deficiency of enzymes also involving testicular synthesis of steroid hormones who may have incomplete formation of male structures (hypospadias).

Other signs of virilization, such as the appearance of pubic hair, are not seen in the newborn but usually appear around the age of two years. In about 33% of the patients with adrenal hyperplasia a salt-losing state also exists. This aspect of adrenal hyperplasia is usually not manifest until the second week of life at which time vomiting, severe dehydration and shock may occur. Minor clinical manifestations of this condition, very often overlooked but usually present well before these children become seriously ill, are irritability, poor weight gain, skin mottling, polyuria and "spitting" of the formula.

In brief, adrenal hyperplasia is due to a defect in cortisol production caused by a lack of specific enzymes. Formation of cortisol is stimulated by pituitary corticotrophin (ACTH). Cortisol inhibits corticotrophin release by a negative feedback system. If biosynthesis fails, corticotrophin level is unchecked leading to a great increase in the synthesis of cortisol precursors and to adrenal hyperplasia. The enzyme deficiency ordinarily does not involve synthesis of androgens and these are produced in excess, accounting for the virilization. Aldosterone production is stimulated by ACTH to some extent but other mechanisms such as the renin-angiotensin system play a more important role. If aldosterone biosynthesis fails as an isolated phenomenon, a severe salt-losing syndrome develops but adrenal hyperplasia does not occur. The diagnosis of adrenal hyperplasia is made by the finding of elevated levels of 17-ketosteroids in the urine which can be suppressed by the administration of exogenous cortisol or one of its derivatives. In addition, in the urine of the affected children different hormonal metabolites according to the specific enzyme deficit are also found. The characteristics of the different enzymatic errors leading to failure in the production of cortisol and/or aldosterone are summarized in Figure 1.

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Lipoid Adrenal Hyperplasia

Most reports of this rare form of adrenal hyperplasia come from Europe. The entity described by Prader and Gurtner[1] in 1955 includes abnormalities in the external genitalia and a severe salt-losing state. A defect in the conversion of cholesterol to pregnenolone, due to the lack of a specific enzyme (20-22 desmolase), has been postulated as the cause of the syndrome.[2] This block, early in the synthesis of corticosteroids, leads to an inadequate production of cortisol and as a consequence increased ACTH production by the pituitary. This leads to adrenal hyperplasia and increased androgenic production. The "salt-losing" component of the syndrome is probably due to inadequate aldosterone production. The pathogenesis of this type of adrenal hyperplasia is not clear, but it is clinically very similar to the 3-β-OL defect.

3-β-Dehydrogenation Defect

This is also a rare type of congenital adrenal hyperplasia resulting from a deficiency in the 3-β-hydroxysteroid dehydrogenase, an enzyme necessary for the conversion of Δ5-Pregnenolone to progesterone and of dehydroepiandrosterone to Δ4-androstenedione. Infants with this defect present with a severe salt-losing state and abnormalities of the external genitalia. Virilization of the female is not marked. Inasmuch as the enzyme activity may be reduced in the testis,[3] males appear with incomplete development (cryptorchidism and hypospadias). The laboratory diagnosis is based on the presence of elevated urinary levels of 17-ketosteroids in the urine consisting largely of DHA, a preponderance of other substances with the 3-β-Δ5 hydroxy structure and absence of abnormal amounts of pregnanetriol.

21-Hydroxylation Defect

This defect, easily the most common enzymatic error in congenital adrenal hyperplasia, was also described by Bongiovanni.[4] Affected female infants have abnormalities of the external genitalia present at birth consisting of enlargement of the clitoris and different degrees of fusion of the labioscrotal folds. Males become virilized early in life. These effects are the result of increased elaboration of androgenic hormones by the adrenal glands. A group of 30% to 40% of children with this defect will present, in addition, a salt-losing state. Infants have early episodes of vomiting and dehydration with electrolyte imbalance consisting of low serum sodium and severe hyperkalemia. It should be mentioned that hyperkalemia is an early sign of the "salt-losing" state of adrenal hyperplasia and in many cases is present well before the hyponatremia becomes evident. The laboratory diagnosis of this particular defect is based on the presence of elevated levels of 17-ketosteroids in the urine and pregnanetriol, the urinary metabolite of 17-OH Progesterone.

11-Hydroxylation Defect

In the 11-hydroxylation defect, in addition to virilization, hypertension occurs. The 11-hydroxylase enzyme activity is necessary for the conversion of 11-Desoxycorticosterone to 11-Desoxycortisol and cortisol respectively. In its absence, 11-Desoxycorticosterone (DOC) and 11-Desoxycortisol (compound S) and their metabolites appear in the urine. As in the previous enzyme defects described, an elevation of the urinary 17-ketosteroid and virilization occurs. The increased chronic production of DOC probably is the reason for the hypertension.[5]

17-Hydroxylation Defect

This is a very interesting and complex defect. A case has been recently reported by Goldsmith, Solomon and Horton.[6] The hallmarks of the syndrome are primary hypogonadism and hypermineralocorticorcism. In the absence of the 17-hydroxylase enzyme activity, the conversion of progesterone to 17-OH Progesterone does not occur and, as a consequence, there is an increase in plasma progesterone and its urinary metabolite pregnandiol.

The inability to form 17-OH Progesterone should be associated with a deficient production of dehydroisoandrosterone, androstenedione, testosterone, estrone and estradiol, if the 17-hydroxylating enzyme is identical in adrenal glands and gonads.

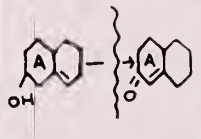
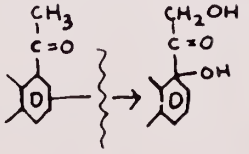
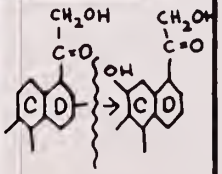
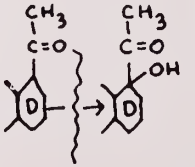
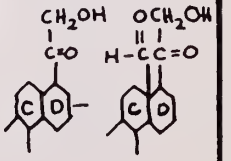
Inasmuch as the synthesis of cortisol is blocked there will be an increase in ACTH which would lead to increase in the production of corticosterone and desoxycorticosterone steroids which will furnish mineralocorticoid activity equivalent to 400 μg of aldosterone and, as part of the syndrome, hypertension, hypokalemia and K-wasting in the urine will occur.

18-Oxidation Defect

The 18-oxidation enzyme step affects only the biosynthesis of aldosterone from corticosterone. A hereditary 18-oxidation defect with impaired biosynthesis of aldosterone clinically will lead to a salt-losing syndrome without an increased elaboration of adrenal androgens by ACTH stimulation. Children with this defect present only symptoms of the salt-losing syndrome (dehydration, failure to thrive, low serum sodium and high serum potassium).

The findings in these patients include normal urinary excretion of 17-ketosteroids, 17-ketogenic steroids, and 17-hydroxycorticosteroids with no increase in the urinary excretion of pregnanetriol. There is no detectable aldosterone in the urine even during salt depletion, but there is a considerable increase in the urinary excretion of corticosterone, 11-dehydrocorticosterone and their tetrahydrometabolites.

TABLE 1

Adrenal Enzymatic Defect	20-22 Desmolase ??	3 B - ol Dehydrogenase	21-Hydroxylase Cortisol	21-Hydroxylase Cortisol & Aldosterone	11- B Hydroxylase	17 Hydroxylase	18 Hydroxylase
Enzymatic block	?						
Adrenal Hyperplasia	Present	Present	Present	Present	Present	Present	Does not occur
Urinary Metabolites	17-Keto-steroids ↑ Pregnanetriol = 0 ??	17-Keto-steroids ↑ DHIA ↑ Δ_5 - compounds	17-Keto-steroids ↑ Pregnanetriol ↑	17-Keto-steroids ↑ Pregnanetriol ↑	17-Keto-steroids Pregnanetriol = 0 Tetrahydro-S ↑	17-Keto-steroids N Pregnanetriol = 0 Pregnandiol=↑	17-Keto-N 11-Dehydro-corticosterone Corticosterone Pregnanetriol=0
Manifest Female	Pseudo-hermaphroditism Electrolyte defect Na ↓ K ↑	Pseudo-hermaphroditism Electrolyte defect Na ↓ K ↑	Pseudo-hermaphroditism	Pseudo-hermaphroditism Electrolyte defect Na ↓ K ↑	Pseudo-hermaphroditism Hypertension	Hypogonadism Hypertension Electrolyte defect Na ↓ K ↓	Electrolyte defect Na ↓ K ↑
Manifest Male	Pseudo-hermaphroditism Electrolyte defect Na ↓ K ↑	Pseudo-hermaphroditism Electrolyte defect Na ↓ K ↑	Virilism	Virilism Electrolyte defect ↓ ↑	Virilism Hypertension	?	Electrolyte defect Na ↓ K ↑

18-Dehydrogenation Defect

In 1964, Ulick, Gautier, Vetter, Markello, Yaffe and Lowe[7] studied a male infant with a salt-losing syndrome associated with defective production of aldosterone. They found increased production of corticosterone, 18-hydroxycorticosterone and desoxycorticosterone, and interpreted the disorder as a biosynthetic block between 18-hydroxycorticosterone and aldosterone (18-dehydrogenation defect).

Inasmuch as the juxtaglomerular cells in the kidneys are believed to be the source of renin, a substance that initiates the formation of angiotensin which is stimulus for aldosterone secretion,[8] in the case of a defect in the biosynthesis of aldosterone with a resulting salt-losing syndrome a compensatory hypertrophy of the juxtaglomerular areas in the kidneys might be expected.[9,10]

Children with this type of primary hypoaldosteronism do well on DOCA therapy and a salt rich diet.

Summary

In summary, the known different enzymatic errors in the synthesis of cortisol and aldosterone are summarized in their clinical and laboratory findings.

The 21-hydroxylase defect is still the most common metabolic error in cortisol synthesis. The findings of abnormalities of the external genitalia in newborns of any sex and or electrolyte disturbances with persistent hyperkalemia should alert the physician toward an abnormal adrenal function.

References

1. Prader, A. and Gurtner, H. P.: Helv. Paedat. Acta 10, 397, 1955.
2. Bongiovanni, A. M.: J. Clin. Endocr. Metab. 21:860, 1961.
3. Goldman, A. S.; Bongiovanni, A. M.; Yakovac, W. C., and Prader, A.: J. of Clin. Endocr. Metab. 24:894, 1964.
4. Bongiovanni, A. M. and Eberlein, W. R.: Pediatrics 21:661, 1958.
5. Bryan, G. T.; Kliman, B., and Bartter, F.: J. of Clin. Invest. 44:No. 6, 1965.
6. Goldsmith, O.; Solomon, D. H., and Horton, R.: New England J. Med. Vol. 277, No. 13 1967.
7. Ulick, S.; Gautier, E.; Vetter K. K; Markello, J. R; Yaffe, S., and Lowe, G. V.: J. Clin Endocr. 24:669, 1964.
8. Mulrow, P. J. and Ganong, W. F.: Aldosterone, A Symposium Blackwell, Oxford P. 265, 1964.
9. Goldsmith, O.; Solomon, D. H., and Horton, R.: New England J. Med. Vol. 277, No. 13. 1967.
10. Cava, J. and Gardner, L. I.: Pediatrics 32:825, 1963.

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editorial comment

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Marchand in 1891 was the first to note the association of female pseudohermaphroditism with hyperplasia of the adrenal cortex, the syndrome of congenital virilizing adrenocortical hyperplasia. Almost 70 years passed before the biochemists discovered the genetic enzymatic deficiencies which were responsible for the "block" in the biosynthetic pathway of corticoids. Compensatory overproduction of pituitary corticotrophin results in adrenocortical hyperplasia with the accumulation of excessive amounts of cortisol precursors and their metabolites with clinical virilization. In some of these, the typical picture is complicated by salt loss and hyperkalemia.

Any newborn with abnormalities of the external genitalia and or electrolyte disturbances deserves immediate investigation of adrenocortical function. Drs. Bejar and Cleveland very comprehensively classify the specific inborn errors of metabolism (enzymatic defects), their clinical appearance, means of diagnosis and treatment.

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Balloon Atrial Septostomy for Transposition of the Great Vessels in Infancy

Dolores F. Tamer, M.D., Rory A. Martin, M.D.,
and Francisco A. Hernandez, M.D.

Transposition of the great vessels is a common congenital heart defect causing death in early infancy. Lambert and co-workers[1] found it to be the most frequent cause of cyanosis in the first week of life, comprising 23% of cases in this age group. The average life expectancy of patients with transposition ranged from three[2] to 19 months[3] before the advent of Blalock and Hanlon's[2] procedure for creating an atrial septal defect. In spite of this advancement, the mortality in infants under three months of age remained prohibitively high[4] due to the combined insult of anesthesia, surgical trauma, uncontrolled heart failure, hypoxia, and the metabolic acidosis which accompanies the severe hypoxia. Lack of success in infants with transposition was made more deplorable when total surgical correction of this anomaly was perfected by Mustard[5] using extracorporeal circulation. This development demanded that early diagnosis and effective palliation be done in infancy, however, so that the child might later be a candidate for total cardiac repair.

In 1966, Rashkind and Miller[6] described a method of creating an atrial septal defect without thoracotomy, using a balloon catheter. This technique was ideally suited to palliation in sick infants. It is the purpose of this report to describe our experience with this technique.

Case Material and Methods

Eight infants with transposition of the great vessels, and normally-formed cardiac chambers and atrioventricular valves, were studied in 1968. There were seven males and one female. All were cyanotic within the first week of life, and six were receiving maintenance digoxin when referred. Nonspecific rejection systolic murmurs were noted in five patients, and the second heart sound was accentuated and single prior to cardiac catheterization. All patients, except the two oldest, were in respiratory distress when first seen.

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The electrocardiograms uniformly demonstrated right axis deviation and right ventricular hypertrophy. In the youngest infant, who was one day old, these findings were considered normal.

The chest roentgenograms were the most useful adjunct to clinical diagnosis. Increased pulmonary vascularity and moderate to severe cardiomegaly were noted in each patient.

Cardiac catheterization and either biplane (Schonander) angiography or cineangiography were performed in each case with one exception: the baby girl who was moribund. She had cineangiography and balloon septostomy only. Catheterization followed standard techniques. Angiograms were obtained after injecting 1 ml./kg. body weight of 75% Hypaque (R) into the right ventricle and into either the left atrium or left ventricle.

After the diagnosis of transposition was confirmed, balloon atrial septostomy was done according to the method of Rashkind and Miller.[6] The largest balloon catheter possible (usually size 5F or 6½F) was advanced from the femoral vein across the foramen ovale into the left atrium where it was inflated with dilute Hypaque. The balloon was then forcefully and rapidly withdrawn into the inferior vena cava in order to rupture the attachments of the fossa ovalis. This procedure was repeated until, at the maximum balloon capacity, the septum could be crossed easily without resistance. Oxygen saturation in the right ventricle, and mean atrial pressures were determined after ballooning whenever the patient's condition was stable enough to provide values comparable to pre-ballooning data. After these procedures, appropriate medical therapy was given. Six of our patients were discharged the following day.

Results

Pertinent catheterization data are summarized in Table 1. A significant increase in systemic oxygen saturation was found in five of the seven determinations made after the Rashkind proce-

dure. Of the other two, one patient (K.W.) had become depressed from the accumulated effect of sedation given during the catheterization. The other (B.S.), at nine months of age, had a relatively high saturation initially and showed only slight improvement after ballooning. The average increase in the other five patients was 32% saturation.

The left atrial mean pressure after ballooning decreased in three of five determinations available for comparison. Left ventricular pressure was moderately elevated in three of five patients where this chamber was entered. One of these (B.C.) was believed to demonstrate pulmonic stenosis by angiography. We did not advance the catheter into the pulmonary artery in any of our catheterizations.

Table 2 summarizes our survival data as compared with the results of Rashkind and Miller[7] in Table 3. There was one death six hours after balloon septostomy, in a 36-hour-old infant. At autopsy she had transposition with intact ventricular septum, a patent ductus arteriosus, and severe pneumonia. The atrial septal defect was small (2-3 mm.) in spite of the balloon septostomy. The other death occurred six weeks after an adequate balloon septostomy had been followed by clinical improvement. The history prior to death suggested a terminal episode of pneumonia; however, no autopsy was allowed. The remaining six patients have been followed from two to ten months and all are doing well clinically. None has shown evidence of decompensation, increased cyanosis, or increased cardiomegaly on chest x-rays. Further palliative procedures have not been necessary as yet.

Discussion

The main benefit derived from creation of an atrial septal defect in transposition of the great vessels is a result of increased mixing of systemic venous blood and oxygenated pulmonary venous blood. The mixture provides an increase in systemic oxygen saturation with less risk of later pulmonary arteriolar changes which have been seen to develop when mixing occurs through a large ventricular septal defect. In addition, the pulmonary blood flow is decreased[8] when left-to-right atrial shunting is facilitated through an atrial defect. The decrease in left atrial pressures is considered a manifestation of decompression of the pulmonary circuit. The hemodynamic changes found by Shaher and Kidd[8] after surgical atrial

TABLE 1. — SUMMARY OF CATHETERIZATION DATA

CASE	AGE	RA MEAN PRESSURE MM. HG.	LA MEAN PRESSURE MM. HG.	LV PRESSURE MM. HG.	RV O_2 % SATURATION	RV O_2 % SAT.	AFTER BALLOON SEPTOSTOMY LA MEAN PRESSURE MM. HG.	REMARKS
T.G.	3 wk.	5	6	—	25	55	3	Improved
K.W.	12 mo.	3	2	30	61	de-pressed	—	Late improvement Coarctation of RPA
B.S.	9 mo.	6	8	4 44	66	69	8	No change
E.S.	7 wk.	4	7	6 —	24, 40	71	—	Improved
B.C.	7 wk.	4	10	60	15, 24	79	10	Improved, assoc. PS
Boy H	9 day	3	8	9 58	48*	88*	2	Improved (late death from ?pneumonia)
Girl D	1 day	—	—	5 —	—	—	—	Moribund, unchanged (large) PDA found at autopsy
R.B.	2 wk.	6	7	36	24	47	5	Improved
				4				

*in O_2

RV: Right Ventricular; RA: Right Atrial; LA: Left Atrial; LV: Left Ventricular; PS: Pulmonic Stenosis; RPA: Right Pulmonary Artery; PDA: Patent Ductus Arteriosus; M: Mean Pressure.

Table 2. — Results of Balloon Atrial Septostomy

	No.	Deaths		Survivors
		Early	Late	
Isolated TGV	6	0	1	5
Assoc. PS	1	0	0	1
Assoc. PDA	1	1	0	0
Total	8	1	1	6 (75%)

PS: Pulmonic Stenosis
PDA: Patent Ductus Arteriosus
TGV: Transposition of Great Vessels

Table 3. — Results of Balloon Atrial Septostomy.
(Rashkind and Miller, 68)

	No.	Deaths		Survivors
		Early	Late	
Isolated TGV	21	1	3	17
VSD	7	1	1	5
PDA	3	3	0	0
Total	31	5	4	22 (71%)

VSD: Ventricular Septal Defect
TGV: Transposition of Great Vessels
PDA: Patent Ductus Arteriosus

septostomy were similar in magnitude and direction to our results with balloon septostomy, indicating the comparable effectiveness of the technique.

It is noteworthy that none of the present series of patients had an associated ventricular septal defect. One patient had associated patent ductus arteriosus, and one had angiographic evidence of pulmonic stenosis. Pulmonary vascular disease, or undefined left ventricular outflow tract obstruction may account for the moderately increased left ventricular pressure we found in two cases. It is important to define these and other variations in intracardiac anatomy prior to total surgical correction, since surgical risk is higher when there are associated malformations.

During our period of observation, no repeat balloon septostomy has been necessary. Rashkind[6] reported that about 10% of his patients were reballooned in the first year of life with improvement after the second procedure. Because of the easy availability of this palliation, and since surgical atrial septostomy carries a more acceptable mortality rate after six months of age, the infants with transposition must be continuously observed for evidence of increasing hypoxia, respiratory distress, and especially heart failure, so that palliation may be accomplished promptly if it becomes necessary. Cyanotic infants pose additional pediatric challenges by their tendency to develop subacute bacterial endocarditis; cerebral thrombosis, especially following dehydration; brain abscess, and consumption coagulopathy. With excellent medical and surgical care, however, infants may survive to be finally physiologically "cured" of this formerly fatal heart defect.

Summary

Eight infants with transposition of the great vessels and intact ventricular septum had balloon atrial septostomy. Six infants have survived from two to ten months with significant clinical improvement.

References

1. Lambert, E. C.; Tinglestad, J. B., and Hohn, A. R.: Diagnosis and Management of Congenital Heart Disease in First Week of Life, Pediat. Clinics N. America 13: 967, 1966.
2. Blalock, A. and Hanlon, C. R.: The Surgical Treatment of Complete Transposition of the Aorta and Pulmonary Artery, Surg., Gynec. & Obst. 90:1, 1950.
3. Keith, J. D.; Neil, C. A.; Vlad, P.; Rowe, R. O., and Chute, A. L.: Transposition of the Great Vessels, Circulation 7:830, 1953.
4. Cornell, W. P.; Maxwell, R. E., and Haller, J. A.: Results of the Blalock-Hanlon Operation in 90 Patients with Transposition of the Great Vessels, J. Thoracic & Cardiov. Surg. 52:525, 1966.
5. Mustard, W. T.: Successful Two-Stage Correction of Transposition of the Great Vessels, Surgery 55:469, 1964.
6. Rashkind, W. J. and Miller, W. W.: Creation of an Atrial Septal Defect Without Thoracotomy, J.A.M.A. 196:173, 1966.
7. ibid : Transposition of the Great Arteries: Results of Palliation in Thirty-one Infants, Circulation 38:453, 1968.
8. Shaher, R. M. and Kidd, L.: Hemodynamics of Complete Transposition of the Great Vessels Before and After the Creation of an Atrial Septal Defect, Circulation (supp. I) 33:I-1, 1966.

Dr. Hernandez, University of Miami School of Medicine, Miami 33152.

editorial comment

Louis E. Cimino, M.D.

This interesting article by Dr. Tamer and her associates summarizes, in many respects, progress in diagnosis and treatment of congenital heart disease in the past quarter century. Many physicians who are in practice today can remember this type of patient as a medical curiosity. Very little was done in the way of diagnosis. Even less was available from a therapeutic standpoint. The subject of this article, transposition of the great vessels, is an excellent example of previously untreatable congenital heart disease. This particular condition was a medical curiosity for which the treatment was digitalis, oxygen and hope. Perusal of these reports indeed shows how far things have moved in alteration of the past situation.

Infants with complete transposition of the great vessels represent a paradox. They are extremely ill and often desperately in need of surgical relief. On the other hand, surgical procedures are tolerated extremely poorly because of the factors mentioned in the article. Balloon atrial septostomy represents a somewhat less drastic form of therapy. It is not without risk and may at times not be successful in achieving its objectives. It represents an alternative to surgical atrial septostomy in an obviously high risk patient who might otherwise have no chance of survival.

This particular procedure is an interesting marriage between diagnosis and therapy. It is combined with the diagnostic procedure, if such is deemed necessary, and is performed in a facility that is primarily used for diagnosis rather than therapy, illustrating the point that the line between the two is indeed fine and may at times be nonexistent.

The present article outlines results which are comparable to those noted in the original studies of this procedure. In the successful cases, there is significant increase in oxygen saturation in the right ventricle, indicating that the goal of increased mixing of oxygenated and unoxygenated blood is usually achieved. If, in addition, a decompression of the pulmonary circuit is accomplished and a lowered incidence of pulmonary arteriolar changes is a result, the procedure will indeed be a worthwhile one for the patient. It may also be assumed from the cases quoted in this article that the best subjects by far are those without other accompanying shunt lesions such as ductus arteriosus and ventricular septal defect. Thus, as is usual, other methods must be found for cases with more severe complicating defects.

Total repair of transposition of the great vessels is at least theoretically possible in many cases. One of the great difficulties in reaching this objective has been the inability of the patients to survive until total repair is feasible. It will be interesting to note the magnitude of change in this situation that will follow balloon atrial septostomy in a larger number of patients. Logically, more patients should be treated and total repair should become an improved procedure. Long term studies of the survivors will add much to the technique of surgery and the postoperative course of patients with major cardiovascular repair procedures.

A certain amount of medical bravery is required to deliberately cause injury during a procedure where most of us have been trained to avoid injury at all cost. Undoubtedly, as balloon atrial septostomy is more frequently performed, a significant number of failures and complications will develop. This present article, in outlining both successes and failures, allows us to form a reasonable perspective. When added to further experience, it should aid in forming a logical foundation for others to attempt similar projects.

▶ Dr. Cimino, 3911 Central Avenue, Tampa 33603.

Single and Combined Drug Therapy of Sulfonylurea Failure

William A. Abelove, M.D. and Raul Echenique, M.D.

The management of maturity-onset diabetes mellitus has been greatly enhanced by 13 years of successful experience with oral sulfonylurea compounds. These agents are primarily effective in patients with onset of diabetes past age 40 who require less than 40 units of insulin daily. Initial unresponsiveness to therapy (primary failure) and later unresponsiveness (secondary failure) have been well defined. Secondary failure to an oral antidiabetic compound indicates a successful response for a period of at least three to six months, with subsequent hyperglycemia and glycosuria indicating loss of pharmacologic effectiveness of the compound. The problem of secondary failure is one which has received considerable attention over the past few years and toward which we have directed our recent efforts and interest. Numerous publications have appeared in the literature relating to the successful management of secondary sulfonylurea failure by the use of more potent sulfonylureas, phenformin, and combinations of the two types of drugs.[1-5]

Since the mode of action of the sulfonylureas is through the stimulation of the pancreatic release of insulin and the method of action of the biguanides is not clearly defined, but probably related to enhanced peripheral utilization of carbohydrate through increased anaerobic glycolysis, the combination of these two types of compounds would appear to be effective in patients in whom there was an inadequate response to either compound alone.

Case Material and Methods

The purpose of this study was to evaluate secondary sulfonylurea failure in two groups of maturity-onset diabetic patients. The first and by far the larger group consisted of ambulatory outpatients attending the metabolic clinic at the Jackson Memorial Hospital-University of Miami School of Medicine. The second and smaller group represented maturity-onset diabetic patients in the private practice of one of the authors (W.A.A.). The age of the patients ranged from 45 to 75 years. Diet was unchanged from A.D.A. standards, as prescribed in the past.

In order to qualify for the study, patients had to demonstrate an initial response to a sulfonylurea with successful control of hyperglycemia and glycosuria for at least three months. When subsequent failure to the compound in maximum dosage occurred, and other causes of secondary failure were ruled out, the patients were then given other oral agents over two to four week intervals starting with tolbutamide, 3 Gm. per day, and then at random, chlorpropamide, 500 mg. per day, acetohexamide, 3 Gm. per day, tolazamide, 1,000 mg. per day, and phenformin (T.D. capsule) in a dose of up to 150 mg. per day. The drugs were administered in divided doses, after meals. If patients responded to one of the sulfonylureas or the phenformin, they were maintained on single drug therapy; however, those failing to respond were given the maximum tolerated dose of phenformin in combination with each of the sulfonylureas. Criteria for satisfactory control included aglycosuria and true fasting blood glucose values as follows:

Satisfactory	
Excellent	under 110 mg.%
Good	under 130 mg.%
Fair	under 150 mg.%
Unsatisfactory	over 150 mg.%

Prior to placing patients in the study group, every attempt was made to differentiate between true secondary drug failure and failures due to other factors, such as infection, improper dietary control, failure to take the drug, and associated concurrent therapy (i.e., thiazides, steroids).

Results

Group I: Clinic Patients

During the year 1966, there were approximately 180,000 outpatient visits to the clinic at Jackson Memorial Hospital. Of these, some 60,000 were to the medical clinic and approximately 4,000 to the metabolic clinic. Of the patients attending medical clinic, approximately 884, or 11%, were diabetic. Of those attending metabolic clinic, 408, or 51%, were diabetic. This indicated active diabetes in 1,292 patients, representing a 15% incidence in the adult clinic population.

From the section of metabolism, University of Miami School of Medicine, Miami.

Presented before the meeting of the Florida Diabetes Association, Sept. 26, 1968, Miami Beach.

This study was supported by a grant-in-aid from the Lilly Research Laboratories, Indianapolis, Ind. Supplies of acetohexamide were through the courtesy of Dr. John Galloway.

Therapy	Diet	Insulin	Oral
Medical Clinic	12%	18%	70%
Metabolic Clinic	9%	41%	50%
Average	10%	30%	60%

The table is self-explanatory. Routine mild diabetics were generally followed in the medical clinic. The metabolic clinic was reserved for the follow-up care of those presenting more difficulties in management. As a result, the incidence of insulin-dependent diabetics was considerably higher in metabolic than in medical clinic. The overall average was 10% on dietary control, although this figure could and should be much higher, 30% on insulin and 60% on oral agents.

Secondary Failures.—Of 1,292 maturity-onset diabetics, approximately 775, or 60%, were on oral therapy. Of these, there were 132 secondary failures, representing a secondary failure rate of 17%. Eighty of these secondary failures were due to other factors (improper diet, infection, other drugs, failure to take drugs, etc.). This then left 52 apparent true secondary failures or a 6.8% secondary failure rate.

Single Drug Therapy.—Of these 52 secondary failures on tolbutamide, 13 (25%) responded to acetohexamide, 13 (25%) to chlorpropamide, 6 of 47 (13%) to tolazamide, and 17 of 48 to phenformin, but eight were discontinued because of gastrointestinal toxicity (19%). The overall success rate was 23 of 52 (44%). Twenty-nine of 52 (56%) represented failures.

Combined Therapy.—Of these 29 patients representing 56% of the secondary failure group, 20% responded to a combination of phenformin and tolbutamide, 67% to a combination of phenformin and chlorpropamide, 71% to a combination of phenformin and acetohexamide, and 33% to a combination of phenformin and tolazamide. The successful percentage on combined therapy was 77%. There were 23% failures on all combinations.

Group II: Private Patients

In this group there were 1,150 active patients, 155 of whom (13.5%) were maturity-onset diabetics. Of these, 25% were on diet, 30% insulin, and 45% oral therapy. Seventy patients were therefore on oral therapy. Of these, 17 were secondary failures (24%). Four of these failures were due to other factors, reducing the number of true secondary failures to 13 (18%). These represented nine secondary failures in regular patients (13.6%) and four referrals for management.

Single Drug Therapy.—Of these 13 secondary failures on tolbutamide, three (23%) responded to acetohexamide, three (23%) to chlorpropamide, two (15%) to tolazamide, and nine to phenformin, but five were discontinued because of gastrointestinal toxicity (30%). This then indicated an overall success rate of seven of 13 patients (54%). Six of 13 failed on single therapy (46%).

Combined Therapy.—Of these six patients (46%), 50% responded to combinations of phenformin and tolbutamide, 83% to combinations of phenformin and chlorpropamide, 83% to combinations of phenformin and acetohexamide, and 33% to combinations of phenformin and tolazamide. This indicated an 83% success on combined therapy with a 17% failure.

Combined Results

Both Groups of Patients
65 secondary failures to tolbutamide

16 responded to acetohexamide	25%
16 responded to chlorpropamide	25%
8 (of 60) responded to tolazamide	13%
26 (of 61) responded to phenformin (43%), but 13 stopped because of GI toxicity	21%
Overall success rate (30 of 65)	46%

Both Groups of Patients
35 failures on single drug

Phenformin and tolbutamide	26%
Phenformin and chlorpropamide	69%
Phenformin and acetohexamide	71%
Phenformin and tolazamide	34%
Overall success rate (25 of 35)	71%

Summary

A total of 845 maturity-onset diabetics on oral therapy were evaluated for secondary sulfonylurea failure. Among those patients with true secondary failure, the use of other sulfonylureas, phenformin or combinations of these drugs resulted initially in an 85% salvage rate. Under continued observation, this decreased to 60%.

In patients in whom oral therapy for the control of diabetes mellitus has been successful, failure on a sulfonylurea should not discourage efforts to manage the disorder through the use of other drugs before initiating therapy with insulin.

References

1. Krall, L. P. and Balodimos, M. C.: Combined Sulfonylurea-Biguanide Therapy of Diabetes Mellitus, Tolbutamide . . . After Ten Years, Proc. Brook Lodge Symposium, Excerpta Medica Foundation, 1967.
2. Beaser, S.: Therapy of Diabetes Mellitus With Combinations of Drugs Given Orally, New England J. Med. 259:1207-1210, (Dec. 18) 1958.
3. Mehnert, H.: Diskussionsbemerkung. Third Congress, International Diabetes Federation, Düsseldorf, 1958.
4. Beaser, S.: Orally Given Combinations of Drugs in Diabetes Mellitus Therapy, J.A.M.A. 174:2137-2141 (Dec. 24) 1960.
5. Goodman, J. I.: Combination Oral Antidiabetic Therapy With Acetohexamide (Dymelor) and Phenformin (DBI), J. Indiana M. A. 59:897-899 (Aug.) 1966.

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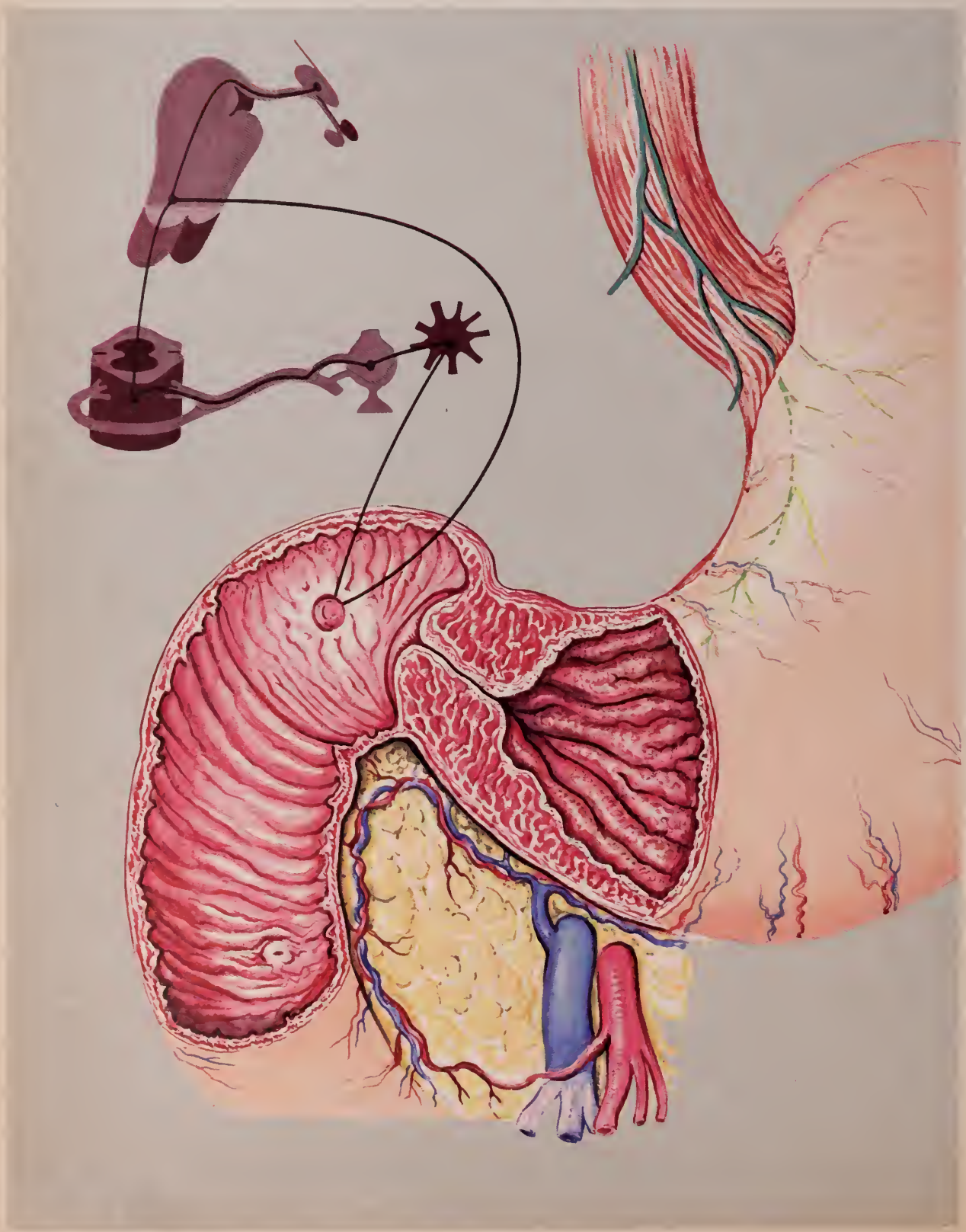
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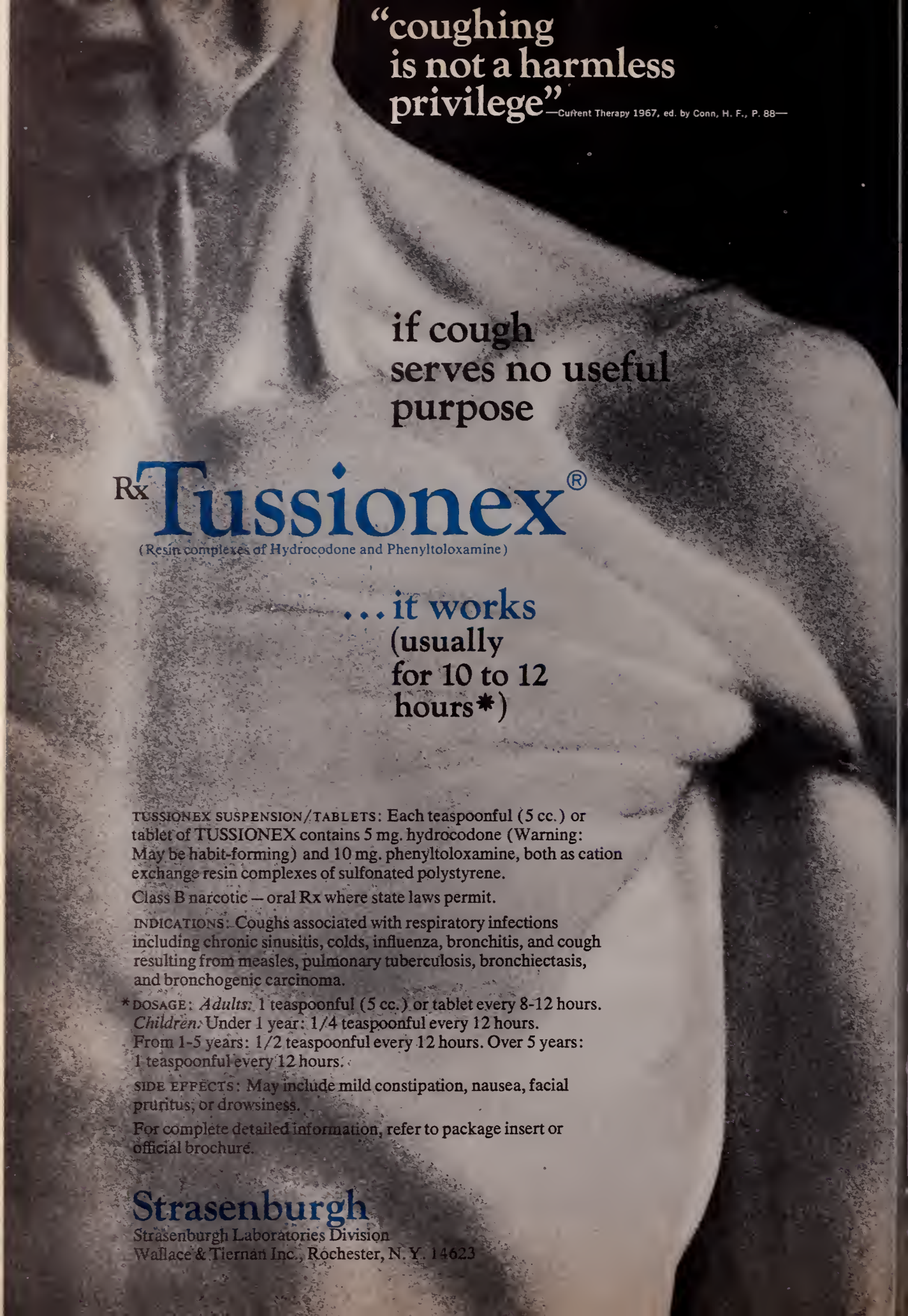
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From the Editor

Franz Stewart

The Cycad

The variety shown on the cover this month is not indigenous to Florida, but other varieties are quite common. The seed cone or megastrobilus shown was photographed from a specimen at the Fairchild Tropical Garden. Successful pollination has been accomplished by blowing pollen over the cone from an ordinary spray gun.

This was attempted several times and yet germination did not occur. The pollinated seeds were thrown out behind the building in disgust. To the surprise of the botanist, small plants developed in profusion from the discarded seeds.

A starch factory is said to have been in operation for 13 years in Lake Helen, Florida about 1900. The starch was collected from native cycads.

Carcinogenic and hepatotoxic effects have been observed in experimental animals from cycasin isolated from cycads. Dr. E. A. Bell, King's College, University of London, reports a specific neurotoxin *Cycas Circinalis* from cycads and suggests this is just the beginning of "the problem of neurotoxicity induced in men and animals by the taking of cycad material."

Julia Morton writes in some surprise that only two cases of human poisoning have been reported to her although this plant is common in Florida and she has been collecting examples of plant poisoning for many years.

The effects on chicks, rats, and the chromosomal changes and tumor production is well illustrated in the report of the Fifth Conference on Cycad Toxicity, April, 1967, sponsored by the National Institute of Arthritis and Metabolic Diseases, N.I.H.; The Fairchild Tropical Garden, and the Department of Biology, University of Miami.

A Linear Approach

Perhaps there are specific illnesses with special remedies which can be used as a cure. A wound can be sewed up, an artery replaced, an infectious disease cured, and these become day-to-day matters, done and forgotten.

Then again this may not be true. Each of these illnesses has an impact on the life pattern of the individual, perhaps small, and again unexpectedly great. Such events must be placed in perspective and measured for significance as they relate to long-time trends of health or illness.

The beginning of vascular, renal, or pulmonary disease, for example, can thus be visualized and concurrent problems watched for interaction. The progress and course of illness can be examined as it develops and becomes more significant or uncomfortable.

In this way management and understanding of a health problem becomes more precise. Treatment measures can be directed more clearly in the direction of long-time help. Pitfalls of exaggerated immediacy of a situation are avoided and appraisal of procedures can be more critical.

The diagnosis and evaluation of an illness with long-time effects will often be made on shortsighted observations, concerned only with the situation at the moment, unless the progress and course in time is appreciated and the patient's own reaction to the illness is understood.

It is much simpler to know the findings at the moment of the doctor's examination, but it is more important to be able to place this in linear projection with the progress to date and the probable future. □

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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. In infants, increased intracranial pressure with bulging fontanels has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolit pruritus ani. Skin—maculopapular and erythematous rashes; a ra case of exfoliative dermatitis has been reported. Photosensitivi onycholysis and discoloration of the nails (rare). Kidney—rise in BU apparently dose-related. Transient increase in urinary output, som times accompanied by thirst (rare). Hypersensitivity reactions—ur caria, angioneurotic edema, anaphylaxis. Teeth—dental staining (y low-brown) in children of mothers given this drug during the latter h of pregnancy, and in children given the drug during the neonatal pe od, infancy and early childhood. Enamel hypoplasia has been seen a few children. If adverse reaction or idiosyncrasy occurs, discontin medication and institute appropriate therapy. Demethylchlortet cycline may form a stable calcium complex in any bone-forming tiss with no serious harmful effects reported thus far in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Shou be given 1 hour before or 2 hours after meals, since absorption impaired by the concomitant administration of high calcium conte drugs, foods and some dairy products. Treatment of streptococc infections should continue for 10 days, even though symptoms ha subsided.

DECLOMYCIN®
DEMETHYLCHLORTETRACYCLINE

Capsules: 150 mg; **Tablets:** film coated, 3 mg, 150 mg and 75 mg of demethylchlortet cycline HCl.

39

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Lederle

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This is a typical "case history" of one new drug – or, rather, a proposed new drug – assembled for submission to the U. S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers – a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

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This message is brought to you as a courtesy of this publication on behalf of the producers of prescription drugs.





Sometimes
he forgets he has hypertension, gets hot
under the collar...high under the cuff.

For such
patients, consider **Regroton®**

chlorthalidone	50 mg.
reserpine U.S.P.	0.25 mg.

To lower blood pressure
and allay anxiety in hypertension.

For brief summary of prescribing information, see next page.

RE-6392

Regroton®

Geigy

chlorthalidone 50 mg.
reserpine U.S.P. 0.25 mg.

the once-a-day tablet for anxious hypertensives

Regroton is a combination of two basic antihypertensives designed to lower blood pressure and allay anxiety in hypertension. With Regroton he can keep his shirt on and you can keep his blood pressure down.

Before prescribing, please review carefully the indications, contraindications, warning, precautions, adverse reactions and dosage information below.

Regroton®
Each tablet contains:
chlorthalidone 50 mg.
reserpine U.S.P. 0.25 mg.

Indications: Hypertension.
Contraindications: History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases.
Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs.
Use in pregnancy: Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue therapy with this agent two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.
Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Severe salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients.
Adverse Reactions: The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible.
Average Dosage: One tablet daily with breakfast.
Availability: Pink, single-scored tablets in bottles of 100 and 1000. (B)46-600-C
For details, please see complete prescribing information.

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RE-6392

FMA Conference on Medical Education

Richard C. Dever, M.D.

The Council on Scientific Activities of the Florida Medical Association hosted a statewide conference on medical education at the Causeway Inn, Tampa, February 15th and 16th, 1969. The meeting was organized to bring together a number of people from throughout the state to discuss the impact of recent changes in medical education across the country and to permit discussion of needs, goals and roles in the state.

The plenary session on Saturday morning was opened by Jack Q. Cleveland, M.D., President of the Association. The first speaker was C. H. William Ruhe, M.D., secretary of the American Medical Association Council on Medical Education, who reported on recent actions of the AMA Board of Trustees and the House of Delegates with respect to the Millis Report. Louis C. Murray, M.D., vice chairman of the State Board of Regents, spoke on the role of the state in medical education. The possible effects of the Regional Medical Program were discussed by Granville W. Larimore, M.D., state director of the program. Russell B. Carson, M.D., reported to the group on a nationwide conference on continuing medical education which was held for state medical society representatives by the American Medical Association in Chicago in November, 1968, and which was attended by Association members and staff. This meeting had been particularly helpful in the planning of our conference.

The afternoon sessions were small workshops, four in number, which met with moderators and recorders to discuss a number of questions such as the role of state and county associations, the community hospital, the medical schools, and the place of local, state and national governments in medical education. The organization of programs for continuing education of physicians was considered at length. The moderators, Henry J. Babers Jr., M.D., Russell B. Carson, M.D., Richard G. Connar, M.D., and Max Michael Jr., M.D., led their groups in an afternoon of active and even sometimes spirited discussions over the entire range of subjects proposed and beyond. Dr. Ruhe circulated through all the groups to answer questions or to aid participants in their sessions.

The Sunday morning general session heard reports from each workshop chairman and an open period of discussion followed. At the conclusion of the discussion, a resolution presented by Dr. Emanuel Suter, dean of the University of Florida College of Medicine, was unanimously adopted by the conference. The resolution urges the Florida Medical Association and the State Board of Regents to discuss and create a broad-based state commission on medical education, composed of physicians, educators and laymen, to study, critically review, and draw up long range plans for premedical, graduate, postgraduate and continuing medical education in the state.

The conference seemed to have been helpful to the participants and the general consensus seemed to be in favor of holding another such meeting in the future, probably on a more structured basis, with discussion groups limiting their sessions to specific areas in the medical education structure now in being in the state. The proceedings were recorded for publication and distribution to the conferees. This will, of course, be available to interested members of the Association

Dr. Dever is chairman, FMA Council on Scientific Activities.

or persons who were unable to attend.

The Council on Scientific Activities has under consideration some of the proposals advanced at the conference and these recommendations, after transmission to the Association's Board of Governors, will possibly come before reference committees and the House of Delegates at the forthcoming 1969 annual meeting. The prospects for future cooperation among the medical schools, community hospitals and organized medicine look bright at this time in the wake of this meeting, and it is the hope of the Council that the Florida Medical Association can be of greater assistance in the support of medical education at all levels and will be more involved in its planning in the future.

Dr. Dever, 329 Ingraham Building, Miami 33131.

Schedule Of Activities

FLORIDA MEDICAL ASSOCIATION ANNUAL MEETING

Americana Hotel, Bal Harbour, May 15-18, 1969

THURSDAY, MAY 15

7:00 a.m.	Delegates Registration, Medallion Room
8:30 a.m.	First House of Delegates, Grand Ballroom
9:00 a.m.	Exhibits Open Daily until 4:30 p.m.
11:00 a.m.	Annual Meeting, Blue Shield, Grand Ballroom
2:30 p.m.	Reference Committee No. 1, Westward Room No. 1
	Reference Committee No. 2, Westward Room No. 2
	Reference Committee No. 3, Westward Room No. 3
	Reference Committee No. 4, Westward Room No. 4
	Reference Committee No. 5, Westward Room No. 5

FRIDAY, MAY 16

8:30 a.m.	Scientific Sections and Specialty Groups
11:00 a.m.	General Session (Baldwin Lecture), Bal Masque
12:15 p.m.	Woman's Auxiliary and FLAMPAC Luncheon, Bal Masque
2:30 p.m.	Scientific Sections and Specialty Groups
6:30 p.m.	President's Reception, Poolside
7:30 p.m.	Alumni and Fraternity Socials

SATURDAY, MAY 17

8:30 a.m.	Scientific Sections and Specialty Groups
1:30 p.m.	Scientific Sections and Specialty Groups
Evening	Specialty Group Social Functions

SUNDAY, MAY 18

7:30 a.m.	Delegates Registration, Bal Masque
8:30 a.m.	Second House of Delegates, Bal Masque

Visit Exhibits 9:00 a.m.-4:30 p.m.

Annual Meeting Fishing and Golfing Tournaments

As in past years, fishing and golfing tournaments will be held during the Association's Annual Meeting May 15-18. They will be open to all physicians registered for the meeting and their families. Although details and application blanks will be available at the Annual Meeting registration desk in the Americana Hotel, preregistration is not only advisable but is requested by the respective tournament chairmen. Physicians interested in the fishing tournament should contact Hobart T. Feldman, M.D., 13085 Ortega Lane, North Miami, Florida 33161, phone (305)947-8411. Potential golfing tournament entrants should contact the Dade County Medical Association, 2 Coral Way, Miami, Florida 33132, phone (305)371-2601.

1969
FLORIDA MEDICAL ASSOCIATION
NINETY-FIFTH ANNUAL MEETING
Americana Hotel, Bal Harbour, Miami Beach, Florida

	MAY 14 WEDNESDAY	MAY 15 THURSDAY	MAY 16 FRIDAY	MAY 17 SATURDAY	MAY 18 SUNDAY
A.M.	8:30 EXHIBITORS SET UP EXHIBITS	8:30 to 10:45 First Session House of Delegates –VISIT EXHIBITS– 11:00 to 12:30 Blue Shield	9:00 to 10:45 Scientific Sections –VISIT EXHIBITS– 11:00 General Session (Baldwin Lecture)	9:00 Specialty Group Meetings and Scientific Sections (ALL DAY) ↓	8:30 Second Session House of Delegates
P.M.	2:00 to 4:30 Delegates and General Registration	–VISIT EXHIBITS– 2:30 Reference Committees	12:15 to 2:00 FLAMPAC and W. Auxiliary Luncheon 2:30 Scientific Sections	Specialty Group Business Meetings	Post-Convention Board of Governors
EVE-NING		Reference Committees *(if necessary)*	6:30 President's Reception 7:30 Alumni and Fraternity Socials	5:00 Dismantling of Exhibits Specialty Group Functions	

Woman's Auxiliary Call To Convention

Another year has passed and five years since the Auxiliary to the Palm Beach County Medical Society has had the pleasure of issuing to all of you the "Annual Call to Convention." This Auxiliary joins with Mrs. Linus W. Hewit, State President, in extending to you a most cordial invitation to the Annual State Convention to be held May 14, 15 and 16, 1969, at the Americana Hotel, Bal Harbour, Florida.

Each year the attendance and enthusiasm of this meeting increases over the previous year—and let's make this year no exception. We have great plans for a most enjoyable few days for you, combining the work of the Auxiliary with much pleasure.

All in all it promises to be three days full of fun and activity and we would like to urge each Auxiliary member to attend this Convention and share with members around the state the warmth of the meeting and working together for the good of each of us.

Nancy Brandon (Mrs. James R.)
1969 State Convention Chairman
Connie Moore (Mrs. R. B.)
Co-Chairman
West Palm Beach

DAILY SCHEDULE

WEDNESDAY, MAY 14

2 p.m.-5 p.m. Auxiliary Registration for all State Officers, Chairmen and County Presidents outside the Floridian Room, lower level. Preregistration for Delegates to the House of Delegates Meeting.
Preregistration for President's and FLAMPAC Luncheons.

4 p.m. Meeting of the Executive Committee in the suite of the President.

THURSDAY, MAY 15

8 a.m.-4 p.m. Registration for First House of Delegates.

8 a.m.-9:30 a.m. Committee meetings.

9:30 a.m. Preconvention Board of Directors meeting in the Floridian Room, Mrs. Linus W. Hewit, presiding.

12 noon President's Luncheon, Medallian Room. Our guest of honor will be Mrs. John M. Chenault, Decatur, Ala., President-Elect of Woman's Auxiliary to the American Medical Association.

2:30 p.m. First Session of House of Delegates, Woman's Auxiliary to the Florida Medical Association. All Auxiliary members invited. Delegates, please sit with your delegation, and wear badges.

5 p.m.-6 p.m. Interview Hour, suite of the President.

FRIDAY, MAY 16

8 a.m. Complimentary continental breakfast, entrance to Floridian Room, lower level.

8 am.-12 noon Registration for Second House of Delegates.

9 a.m. Annual Meeting of House of Delegates, Woman's Auxiliary to the Florida Medical Association. All delegates be seated with your delegation, and wear badges.

12:15 Auxiliary and FLAMPAC Buffet Luncheon, Bal Masque Room.
Reservations in advance suggested. Speaker, Sen. George Murphy, California. All members and husbands invited.

2:30 p.m. Postconvention Board Meeting, Floridian Room, Mrs. C. Herbert Gilliland, presiding.

6:30 p.m. FMA President's Reception.

Benefit Art Show on display during entire convention.

vacation in
a vial:
the spasm
reactors
in your practice
deserve



"the Donnatal® Effect"

	each tablet, capsule or 5 cc. of elixir (23% alcohol)	each Donnatal No. 2	each Extentab®
hyoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.
(Warning: may be habit forming)			

Brief Summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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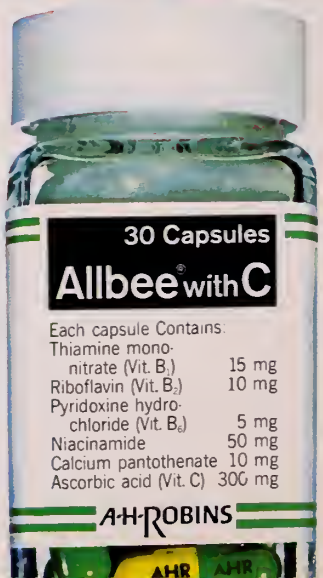
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3RD ANNUAL BENEFIT ART SHOW

MAY 14-18

FMA CONVENTION

AMERICANA HOTEL
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2. **INSTITUTE FOR BIOMEDICAL RESEARCH**
3. **STUDENT LOAN PROGRAM**

DOCTORS AND THEIR WIVES ARE ELIGIBLE TO ENTER. PRIZES WILL BE DONATIONS TO THE AMERICAN MEDICAL ASSOCIATION EDUCATION AND RESEARCH FOUNDATION IN THE NAME OF THE WINNERS.

REGISTRATION DEADLINE — APRIL 30, 1969

(Complete Details and Applications were included in "Briefs" Newsletter of February 21, 1969)

I would like to submit _____ entry(ies) in the Benefit Art Show.

Name _____

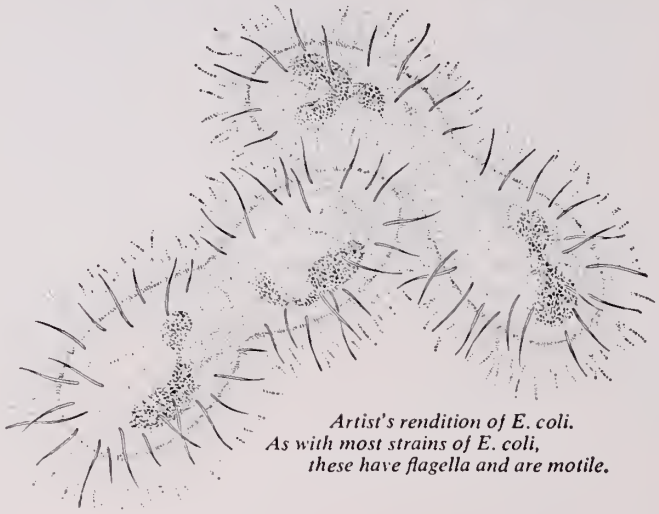
Address _____

City _____ County _____

Registration fee of $10.00 for up to two (2) entries is enclosed.

Make checks payable and mail to: Mrs. Thomas C. Kenaston Jr., 1305 Rockledge Drive, Rockledge, Fla. 32955.

To help avert chronicity in acute cystitis



Artist's rendition of E. coli. As with most strains of E. coli, these have flagella and are motile.

Although it may coexist v
chronic pyelonephritis or pr
titis, many cases of chronic c
tis may result from incomp
treatment of a simple, acute c
tis. For this reason, it is b
increasingly recommended
appropriate antibacterial the
in full dosage be maintaine
up to two weeks or longer.

Most frequently, the domi
pathogen is gram-negative,
ally *E. coli;* most often, you
find Gantanol® (sulfamet
azole) effective against *E.*
and other sensitive organis
gram-positive and gram-nega
—commonly seen in cystitis
other urinary tract infecti
Wide clinical usage of Gant
has confirmed the efficacy of
wide-spectrum antimicro
agent in the treatment of cys

The rapidity of bacterial
tiplication in a favorable uri
environment is well kn
Prompt control of acute bla
infection is therefore esse

Before prescribing, please consult
plete product information, a summa
which follows:

Indications: Acute and chronic ur
tract, respiratory and soft tissue i
tions due to susceptible microorgan
prophylactically following diagnost
strumental procedures on genitour
tract.

Contraindicated in sulfonamide-sen
patients, pregnant females at term,
mature infants, or newborn infants
ing first 3 months of life.

Warnings: Use only after critical
praisal in patients with liver or
damage, urinary obstruction or l
dyscrasias. Deaths reported from
persensitivity reactions, Stevens-Jo
syndrome, agranulocytosis, aplastic
mia and other blood dyscrasias. In cl
intermittent or prolonged therapy, b
counts and liver and kidney functio
should be performed. Clinical data i
ficient on prolonged or recurrent th
in chronic renal diseases of childre
der 6 years.

Precautions: Occasional failures ma
cur due to resistant microorganisms
effective in virus and rickettsial i
tions. Sulfonamides not recomm

not only to reduce the patient's discomfort but to prevent chronicity and possible ascending infection.

Gantanol (sulfamethoxazole) provides antibacterial activity within two hours of the initial 2-Gm dose, and subsequent 1-Gm doses, taken morning and evening, maintain therapeutic blood and urine levels lasting up to 12 hours. Significant symptomatic response is frequently achieved within 24 to 48 hours in acute, uncomplicated cystitis and other responsive urinary tract infections. In addition, Gantanol is usually well tolerated. Should prolonged therapy be required, the convenient *b.i.d.* dosage helps to minimize the problem of skipped doses.

Over eight years' clinical use has thoroughly demonstrated the qualities that make Gantanol a good choice for initial therapy of most urinary tract infections, including acute cystitis.

---

for therapy of acute infections caused by group A beta-hemolytic streptococci. At present, penicillin is drug of choice in acute group A beta-hemolytic streptococcal infections; although Gantanol has produced favorable bacteriologic conversion rates in this infection, data insufficient on long-term follow-up studies as to its effect on sequelae of rheumatic fever or acute glomerulonephritis. If other treatment cannot be used and Gantanol is employed in such infections, *important that therapy be continued in usual recommended dosage for at least 10 days.* Observe usual sulfonamide therapy precautions, including adequate fluid intake. Use with caution if history of allergies and/or asthma. Follow closely patients with renal impairment since this may cause excessive drug accumulation. Need for indicated local measures or surgery not obviated in localized infections.

Adverse Reactions: Depending upon the severity of the reaction, may withdraw drug in event of headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

Gantanol® (sulfamethoxazole) assures rapid, sustained, antibacterial activity with b.i.d. dosage

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Florida Medical meetings

FMA Approved Postgraduate Meetings

APRIL

4- 5 Seminar on Adrenal Glands, University of South Florida, Tampa

18-19 Arthritis and Collagen Diseases, Mayflower Hotel, Jacksonville

25-27 Seminar on Blood Component Therapy. Manger Motor Inn, Tampa

26 Third Annual Seminar on the Advancement in the Diagnosis and Management of Cancer, Port-O-Call, St. Petersburg

MAY

1- 3 Psychotherapy in Medical Practice: Anxiety and Depression, Tides Hotel and Bath Club, Redington Beach

7- 9 Greater Miami Pediatric Society Annual Seminar, Cedars of Lebanon Hospital Auditorium, Miami

8-10 "Infections—Clinical and Practical," Nineteenth Annual Postgraduate Seminar, Mount Sinai Hospital, Miami

AUGUST

21-23 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Ft. Lauderdale

SEPTEMBER

27 Eighth Annual Physician Seminar on Respiratory Diseases, Orange Memorial Hospital Auditorium, Orlando

NOVEMBER

6- 7 ENT for the Family Practitioner, University of Miami School of Medicine, Miami

6- 7 Seminar on Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville

Plan NOW to Attend
Florida Medical Association
95th Annual Meeting
May 14-18, 1969
Americana Hotel
Bal Harbour

National and Regional Meetings in Florida

APRIL

19-24 Association for Research in Ophthalmology, Sheraton Sandcastle Hotel and Statler-Hilton Inn, Sarasota

28-May 1 American College of Obstetricians and Gynecologists, Americana Hotel, Bal Harbour

30-May 3 Neurosurgical Society of America, Key Biscayne Hotel, Key Biscayne

MAY

2- 4 American Academy of Psychoanalysis, Holiday Inn, Bal Harbour

2- 4 Society of Biological Psychiatry, Hilton Plaza, Miami Beach

2- 5 American Psychoanalytic Association, Deauville Hotel, Miami Beach

3 American College of Psychiatrists, Deauville Hotel, Bal Harbour

4- 6 American Society for Adolescent Psychiatry, Miami

4- 9 American Society for Microbiology, Fontainebleau Hotel, Miami Beach

5- 9 American Psychiatric Association, Americana Hotel, Bal Harbour

19 Association for the Advancement of Psychotherapy, Hotel Americana, Bal Harbour

24-26 National Tuberculosis and Respiratory Disease Association, Fontainebleau Hotel, Miami Beach

24-26 American Thoracic Society, Fontainebleau Hotel, Miami Beach

DECEMBER

6-11 American Academy of Dermatology, Americana Hotel, Bal Harbour

Florida Medical | comment

From One Doctor to Another

Blue Shield President Talks About Usual and Customary

Warren W. Quillian, M.D.

Dear Doctor:

I was glad to receive your letter concerning Florida Blue Shield's possible involvement with a "usual and customary" coverage program. The questions you asked were pertinent and, I am sure, are on the minds of many of our colleagues. In fact, we have received several similar letters posing the same type of queries. In collaboration with our executive staff, we have attempted to find some of the answers.

As you surmised, Florida Blue Shield is in the process of developing a usual and customary program, partly to conform to the change in the National Association of Blue Shield Plans' Membership Standards (which requires that each Plan make available a . . . *paid-in-full program based upon the usual, customary and reasonable charges of physicians*), but also for several other reasons. Perhaps we can answer some of your questions by bringing you up to date on events which necessitate this type of program. Members of the Blue Shield board have been in a unique position to observe the necessity and desirability of developing such a program.

The usual and customary program which we propose is in response to a problem which has been on the minds and hearts of many for a long time: to provide a system of paying medical bills —in full—which is equitable to both patient and physician, and yet is predictable and, therefore, marketable.

On one side, the patient—the public—is expressing a strong desire to have his medical bills paid in full. He is fast approaching a point of *demanding* that this be done—*by whatever means are available!* And, of course, he wants it now. On the other side stands the physician. Naturally, we want the bills we send to patients to be paid in full. But we are also concerned with the manner in which this objective is to be accomplished. We want a system that will not only pay the patients' bills, but will also give us continued professional freedom—and allow us some control in its operation.

With these qualifications in mind, we have voiced support several times for a usual and customary program. As recently as December of 1966, the American Medical Association House of Delegates reaffirmed that usual and customary coverage was medicine's method of choice for the prepayment of professional services.

Aware of both the public's and the physician's positions on this problem, and with the advice and counsel of Florida physicians, Florida Blue Shield has developed a usual and customary charge program which it feels is both equitable and logical and the most generally acceptable way to accommodate the needs of both.

Properly administered, the Blue Shield program can provide professional freedom within a framework of marketable predictability. This can best be illustrated by answering your question concerning the possibility of a fixed fee schedule evolving from usual and customary coverage.

The key to the usual and customary program is that its whole purpose is to accommodate a *spectrum* of physicians' fees, *eliminating the artificial grouping of charges in a fee schedule.* As a basis for this program, Blue Shield has used the definitions developed by the Florida Medical Association for usual, customary and reasonable, and agreed to adhere to these in its contracts and administration. These definitions are:

Dr. Quillian is president, Blue Shield of Florida, Inc.

TB is still around.

In 1967 almost 45,000 new active cases were reported. Isn't that a good reason to make tuberculin testing with the white LEDERTINE™ Applicator a routine part of your physical examinations?



TUBERCULIN TINE TEST
(Rosenthal) with Old Tuberculin

Precautions: With a positive reaction, consider further diagnostic procedures. Use with caution in persons with active tuberculosis or known allergy to acacia. Vesiculation, ulceration, or necrosis may occur at the test site in highly sensitive persons.

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A Division of American Cyanamid Company, Pearl River, N.Y.
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Blue Shield has laboriously studied several million fees of Florida physicians for professional services in an effort to determine customary charges. We will continue to study incoming charges and adjust accordingly.

This lack of a fee schedule does raise two possibilities, however.

The first is that the Plan may fail to keep customary charge levels current. We, as physicians, have adequate defenses against this possibility through firm binding agreements between the Plan and the medical society, or through participating, or through both.

The second possibility is that a significant percentage of physicians will respond to usual and customary coverage by seeking the maximum permissible payment. If this happened, it would destroy the checks and balances inherent in normal fee ranges. In theory, this is possible. In practice, Blue Shield's experience is that if physicians are permitted to set fair fees, they will preserve the integrity of the process.

One final question you asked was how nonparticipation in the usual and customary program will affect your participation in regular Blue Shield contract programs. By action of the Florida Blue Shield board of directors, it is not necessary that you participate in the usual and customary program in order to retain your participation in the regular Blue Shield contract programs. In other words, it is optional.

I hope we have been able to answer your questions. The entire program will be presented to you at the meeting of the Florida Medical Association House of Delegates in May; we look forward to seeing you there.

▶ Dr. Quillian, 140 Alhambra Circle, Coral Gables 33134.

Our Mail

Salute to Dr. Zellner

Jack Q. Cleveland, M.D., President
Florida Medical Association

Dear Dr. Cleveland:

I must take the time to write to you to commend Dr. Robert E. Zellner for his masterful summary of the controversy with the Florida Industrial Commission over the Workmen's Compensation medical fee schedule, and for his diligent and laborious efforts in this matter on behalf of the Florida Medical Association.

Dr. Zellner continues to grow in stature in my eyes as he continues to serve the Association in many capacities. Even the fact that he has attained our highest office and has served his term so ably as our President has not deterred him from taking on further duties and responsibilities for the FMA.

As one individual member of the Florida Medical Association, I salute this fellow member.

Franklin J. Evans, M.D.
Coral Gables

Departmental Acknowledgement

Dear Editor:

Regarding the article entitled "Acquired Cytomegalovirus Infection and Retardation of Somatic Growth," I would like to acknowledge the fact that the patients described in that paper which appeared in the February issue of the Journal were referred to the pediatric service of the Shands Teaching Hospital.

I wish to express my appreciation for the cooperation of the Department of Pediatrics of the University of Florida College of Medicine in making these patients available for study.

Richard J. Hildebrandt, M.D.
Gainesville

Responsibilities in Organ Donations

Dear Editor:

A recent article entitled "A Critical Analysis of the New Florida Autopsy Consent Statute" by Dr. John R. Feegel in the February issue of the Journal mentions Florida Statute 736.10 which permits a person to voluntarily donate eyes after death.

I wonder if we could have some further clarification on this. It has been my own practice *not* to remove eyes from a body, even if they carried signed cards—donation cards such as from the Lions Club—available on the person, unless I also have permission of the next of kin. I require this in writing.

Perhaps I am being overly cautious. However, according to what I make of the article I would probably be on safe grounds to proceed with the enucleation even over the objections of the next of kin or the family, if the patient himself meant to donate his eyes after death. (I do not think I would do this over their objections, but it appears I could probably get away with it in attempting to carry out the wishes of the deceased).

Perhaps one of our medical-legal writers could elaborate on this aspect of donations and responsibilities and liabilities therein entailed.

Nicholas H. Kalvin, M.D.
Naples

Perspectives of Presidents

Dear Editor:

Hooray for the President's Page on perspective in the February issue of the Journal.

I remember Robert Burns as a poet, George Washington as a President, but didn't we also have an Abraham Lincoln who was once a President and also was born during the month of February?

Happy perspectives to all.

Harry E. Beller, M.D.
Miami

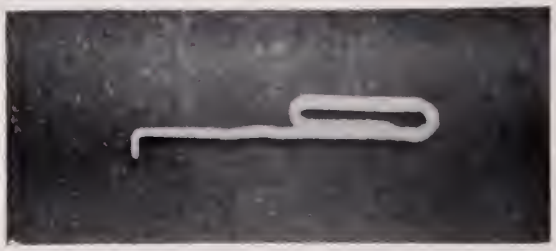
Very Minor Procedures

Dear Editor:

In all our varied practices there are a number of useful "very minor procedures" we have learned from others or from experience. These are seldom described in "the literature;" however, they are very useful in our daily practice. I believe these could be shared through this department of the Journal.

An "old hand" emergency room nurse taught me this one. A quick, easy and (almost) painless way to relieve the common, very painful hematoma under a finger (or toe) nail.

Take a paper clip (or other small diameter wire) and partially unbend, then bend a small right angle at the straight end as illustrated.



Your "instrument" is now ready. Heat the bent tip over a flame (Bunsen burner, alcohol lamp, cigarette lighter, etc.) until the tip glows red hot. Quickly touch the nail directly over the trapped blood with the heated tip burning a hole through the nail. Little or no pressure is needed, blood is immediately released and a relieved and grateful patient is your result.

I hope this gets the ball rolling for other contributions to the "very minor procedure" collection.

Beverly B. Jones, M.D.
Coral Gables

Have you an item for the very minor procedure collection?—Ed.

Royal College of General Practitioners, London

Dear Dr. Stewart:

How delightful of you to send me the copy of the Florida Medical Association Journal.

We are so happy that you enjoyed your visit, and the tiny one to this village.

I am sure that the profession in our two countries has so much of friendship to exchange.

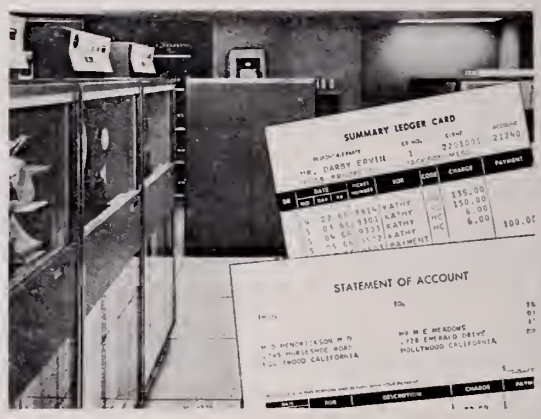
All best wishes from us to you both.

Dame Annis Gillie
Bledington

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In the complex picture of moderate to severe anxiety...



There is a new reason for prescribing Mellaril (Thioridazine HCl)

Effectiveness in mixed anxiety-depression

Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

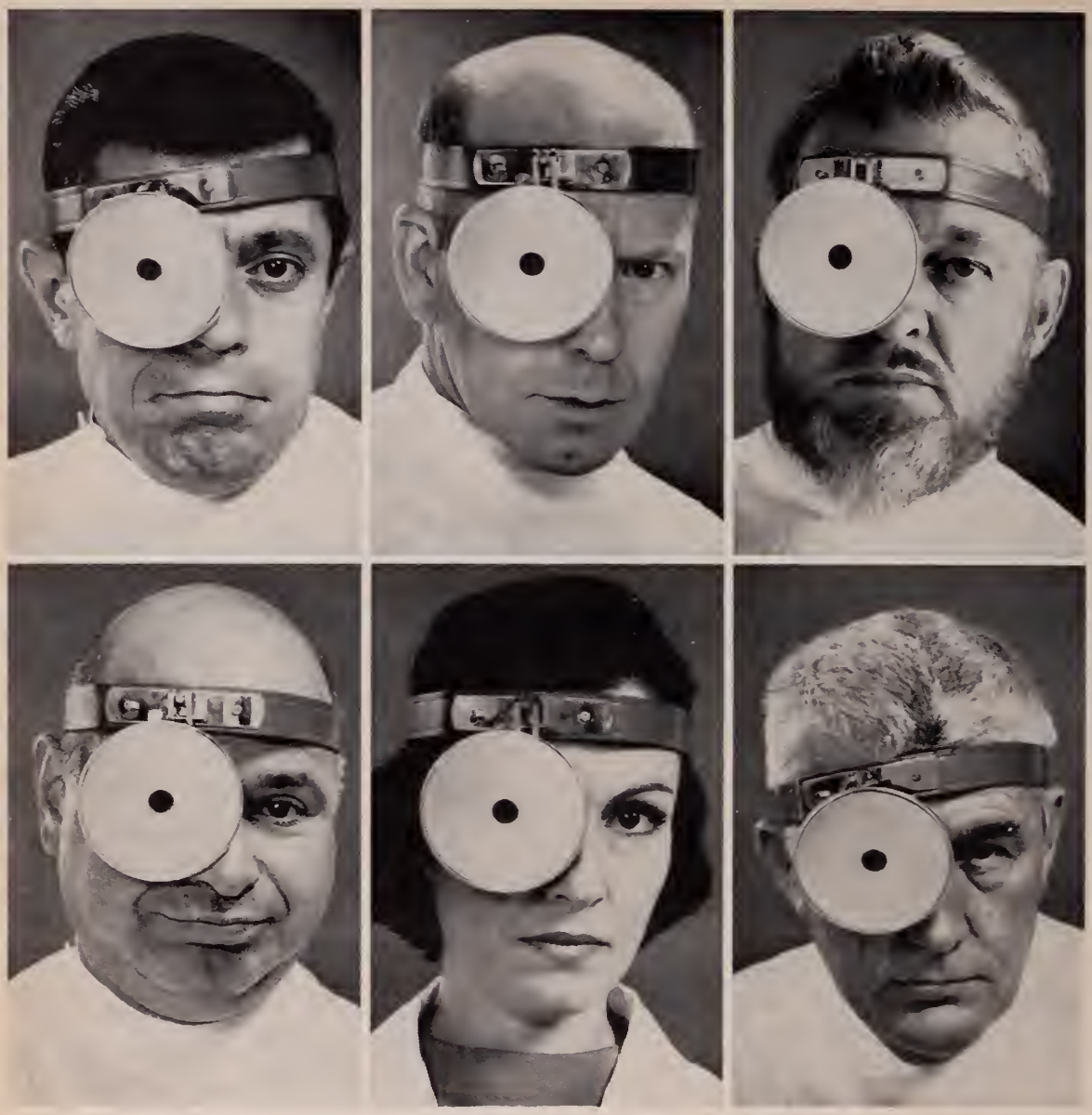
Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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So next time you hear someone say that *all* aspirin tablets are alike, you can say, with confidence, that "it just isn't so."

You might also say that all otolaryngologists aren't alike, either.



Florida Medical deaths

Abarbanel, Milton G., Hollywood; born 1911; University of Maryland, 1938; member AMA; died Jan. 19, 1969, aged 58.

Cobb, Alva Thomas Jr., Gainesville; born 1904; Emory University, 1928; member AMA; died Jan. 2, 1968, aged 64.

Ellis, William Harrison, Miami; born 1889; Georgia College of Eclectric Medicine, 1916; member AMA; died Dec. 6, 1968, aged 79.

Gertman, Samuel, Washington, D.C.; born 1915; University of Maryland, 1938; member AMA; died Dec. 25, 1968, aged 53.

Moseley, Dayton Lee Jr., Tampa; born 1921; Louisiana State University, 1943; member AMA; died Jan. 13, 1969, aged 48.

Nemser, Abraham, Miami Beach; born 1893; Long Island College, 1916; member AMA; died Dec. 21, 1968, aged 75.

O'Kelley, Marion Benson, Leesburg; born 1904; Emory University, 1935; member AMA; died Jan. 1, 1969, aged 65.

Owen, Richard W. Spencer, St. Petersburg; born 1894; Indiana University of Medicine, 1921; member AMA; died April 9, 1968, aged 74.

Pierce, Francis Dowdle, Fort Lauderdale; born 1902; Tulane University, 1928; member AMA; died Sept. 18, 1968, aged 66.

Taylor, Thomas Walter, Sarasota; born 1886; Emory University, 1915; member AMA; died Dec. 31, 1968, aged 82.

Turton, Murrell Hodges, Fort Lauderdale; born 1898; Ohio State University, 1924; member AMA; died Nov. 2, 1968, aged 70.

$1,000 reward for your help in locating this man:



THEODORE (TED) GEORGES

Dear Colleagues:

My cousin, Theodore Georges, who may be a victim of amnesia, disappeared five years ago and we have had no communication from him since that time.

If any doctor has treated him or knows of his whereabouts, please call me collect (904) 472-2242.

G. W. Karelas, M.D.
The Medical Rotunda
Newberry, Florida 32669

Description:

Name: Theodore (Ted) Georges

Age: Now 32 (Picture taken at 28 years) (born 6-30-1937)

Height: 5 ft., 9 inches

Weight: 155 pounds

Eyes: Brown

Hair: No hair (Alopecia areata) Sometimes has patches of hair

Health: May be victim of amnesia

Complexion: Light

Occupation: School teacher—taught science courses high school. Has worked in Post Office (part-time). Familiar with restaurant and soda fountain work.

Marital status: Single

Always wears glasses

Home town: Originally from Lowell, Mass.

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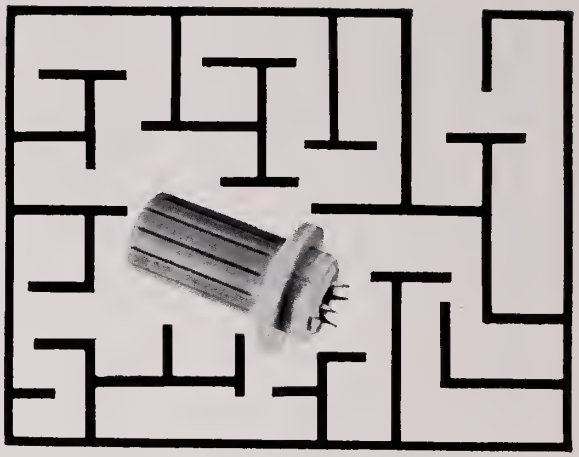
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Legal Status of Unlicensed Physicians in Florida

George S. Palmer, M.D.

The following statement is printed at the request of the State Board of Medical Examiners.—Ed.

There have been many requests from physicians in Florida concerning the propriety of hiring unlicensed physicians to substitute for them in hospitals, clinics or offices in such areas as pathology, radiology and other hospital-based specialties. This statement is made in order to clear up the question of what an unlicensed physician may or may not do in the state of Florida. Unlicensed physicians may function or be employed in our state in only three (3) categories:

1. As a physician in state institutions, such as mental hospitals, prisons, Sunland institutions and tuberculosis hospitals.
2. In intern and residency programs which are approved by the Council on Medical Education of the American Medical Association.
3. As house officers in hospitals licensed by the Florida State Board of Health. In this category, the unlicensed physician must be under the direct supervision, control and responsibility of licensed physicians who, in turn, are responsible for all actions and decisions of the unlicensed physicians.

Unlicensed physicians may not do any of the following:

1. Act as or replace hospital radiologists, pathologists, anesthesiologists or physiatrists.
2. Work in physicians' offices, groups or clinics as medical doctors.
3. Be employed as emergency room physicians.
4. Write prescriptions.
5. See, treat or advise patients, except as above indicated, and only under the direct supervision and responsibility of licensed physicians.

Anyone who uses an unlicensed physician illegally is guilty of a violation of the Medical Practice Act. He is not only aiding and abetting the unlawful practice of medicine, but by doing so he may make himself liable to prosecution and also prejudice the unlicensed physician in his eligibility to take the medical licensure examinations in the future.

Please cooperate with your Board of Medical Examiners in this. If you are in doubt, write to the Executive Director and ask before you act unwisely. A word to the wise should be sufficient.

Dr. Palmer, P. O. Box 5, Biscayne Annex, Miami 33152.

Dr. Palmer is executive director, Florida State Board of Medical Examiners.



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This patient may appear to "have everything" but, like so many people getting along in years, she may well be in need—*medically*. Though there is no evidence of organic disease, she does have symptoms (fatigue, vague aches and pains, malaise) that may b indicative of—

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Suggested Dosages: *Male and female*—1 Tablet or Capsule, or 3 teaspoonfuls Liquid, daily or as required.

In the female: To avoid continuous stimulation of breast and uterus, cyclic therapy is recommended (3 week regimen with 1 week rest period—Withdrawal bleeding may occur during this 1 week rest period).
In the male: A careful check should be made on the status of the prostate gland when therapy is given for protracted intervals.

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INTERNIST WANTED: Board eligible or certified. Cardiology interest. In suburban Miami, Florida. Long established professional association to replace third man vacancy. Immediate opportunity. Salary negotiable. Corporation participation available after first year. Send curriculum vitae, age, marital and military status, licensure and financial interest to C-860, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: Training in cardiology for partnership affiliation in well-established professional association in Miami Beach. Immediate opening. Write C-865, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: Internist, board certified since 1953, desires associate to share practice in internal medicine in Hollywood, Fla. State qualifications, licensure and service status. Reply to: Melvin M. Stone, M.D., 1755 Adams St., Hollywood, Fla. 33020. Phone (305) 927-2811.

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LOCUM TENENS WANTED: To cover general practice May 24th to June 30th, 1969. Will supply residence, car and $2,000. Write John W. Smythe, M.D., Medical Arcade Bldg., Winter Haven, Fla. 33880 or phone 293-9700.

Miscellaneous

WANTED: Emergency room physicians, Florida licensed, to join group, St. Petersburg. Yearly income $22,000 plus. Write C-864, P.O. Box 2411, Jacksonville, Fla. 32203.

GENERAL PRACTITIONER OR INTERNIST: Excellent opportunity in busy all new medical clinic located near new, modern well-equipped hospital. Generous income. No investment necessary. Gulf coast. Send curriculum vitae first letter. Write C-873, P.O. Box 2411, Jacksonville, Fla. 32203.

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WANTED: GP or general surgeon to join GP in small but growing community near medical school. Two new offices available with new hospital fully equipped. Write C-834, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: General practitioner, internist, pediatrician for association with mixed group in central Florida. Liberal salary first six months, then salary plus percentage. All expenses paid. Share coverage. Contact Donald F. Jones, M.D., Bond Clinic, Winter Haven, Fla. 33880. Phone (813) 293-1191.

GP OR INTERNIST to associate with three-man group, one surgeon and two GP's. Suburban Jacksonville. $30,000 first year to approximately $40,000 in two years of partnership as agreed. Call Dr. M. B. Bergh, (904)264-9511.

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(Continued)

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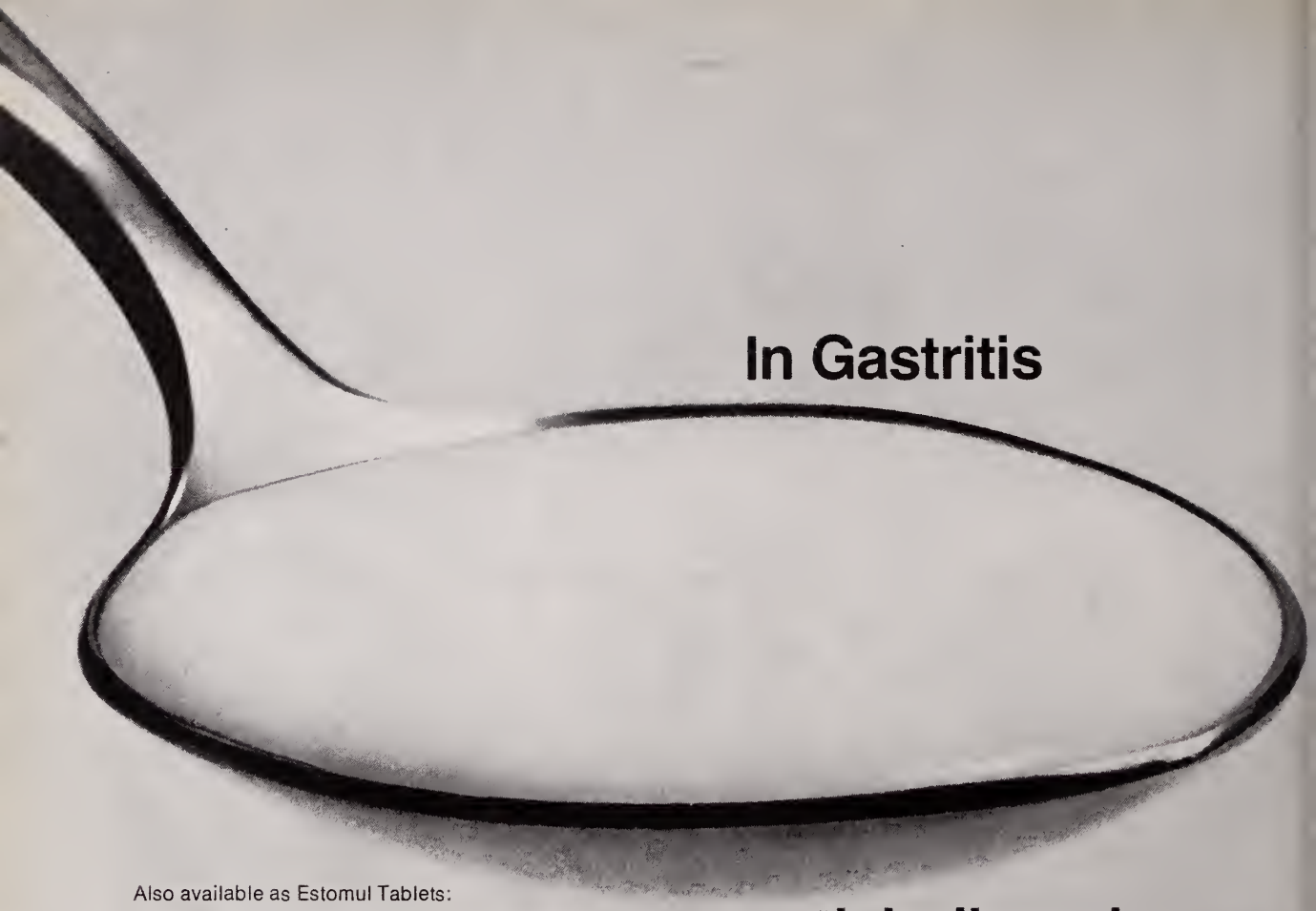
Florida Medical ASSOCIATION

MAY, 1969 • VOLUME 56 • NUMBER 5

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Each tablespoon (15 cc.) contains:
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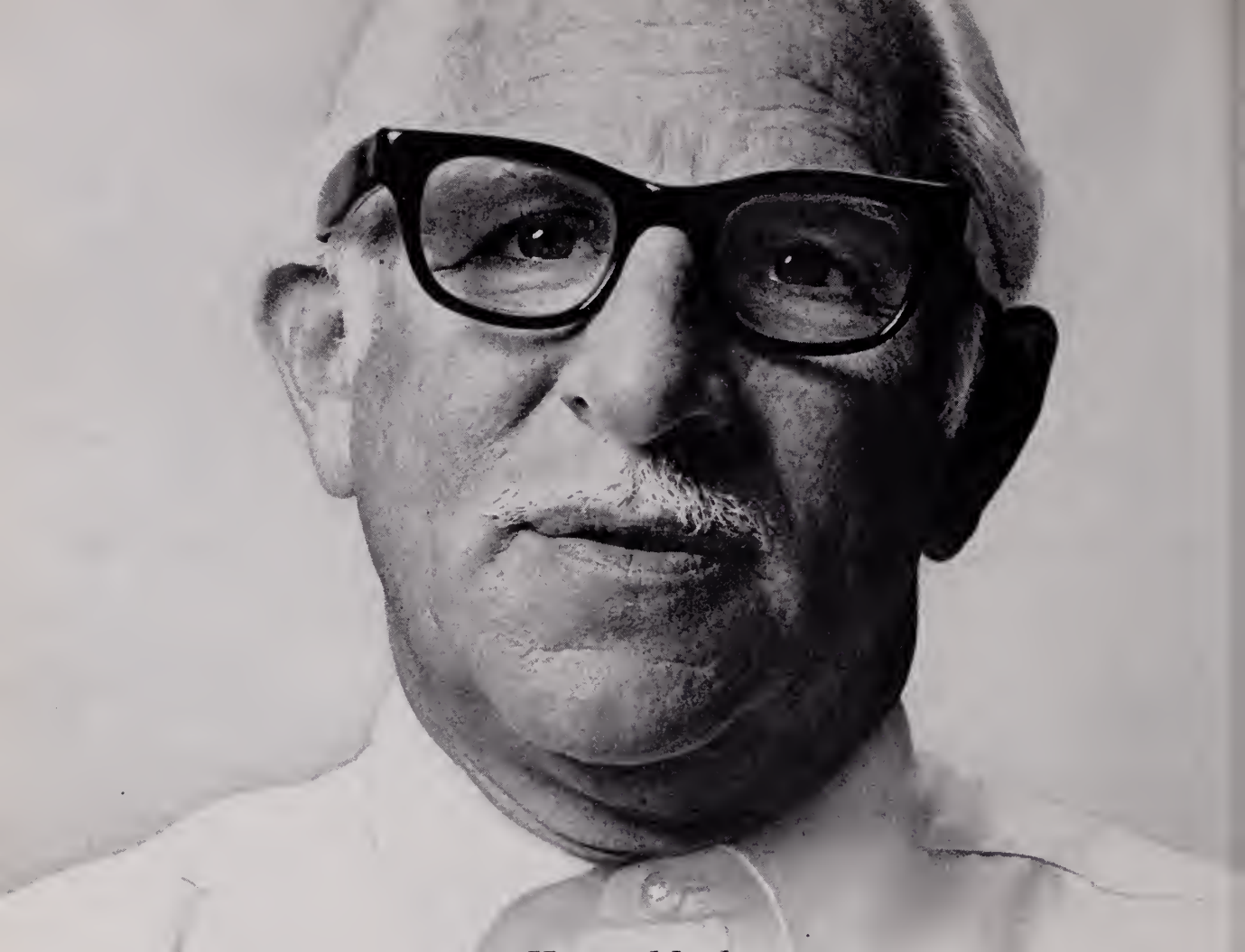
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(meprobamate + tridihexethyl chloride)

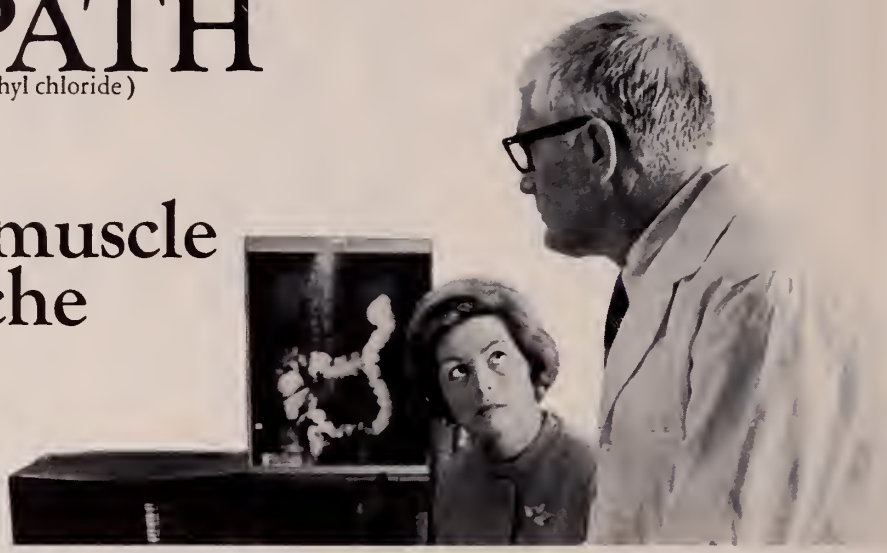
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Gently but firmly MILPATH®

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Relaxes smooth muscle and psyche



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Suicidal attempts may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Excessive dosage has led rapidly to sleep, then reduction of vital signs to basal levels. Empty stomach, and if respiration becomes very shallow and slow, cautiously give CNS stimulants (e.g., caffeine, pentylenetetrazol, amphetamine); also pressor amines if indicated.

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References

1. Harrison, T. R., et al.: Principles of Internal Medicine, Fifth Edition, New York, The Blakiston Division, McGraw-Hill Book Company, 1966, p. 1019. 2. Bockus, H. L.: Gastroenterology, Second Edition, Philadelphia & London, W. B. Saunders Company, 1964, Vol. II, p. 729 et seq.

(1928A01J)

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Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

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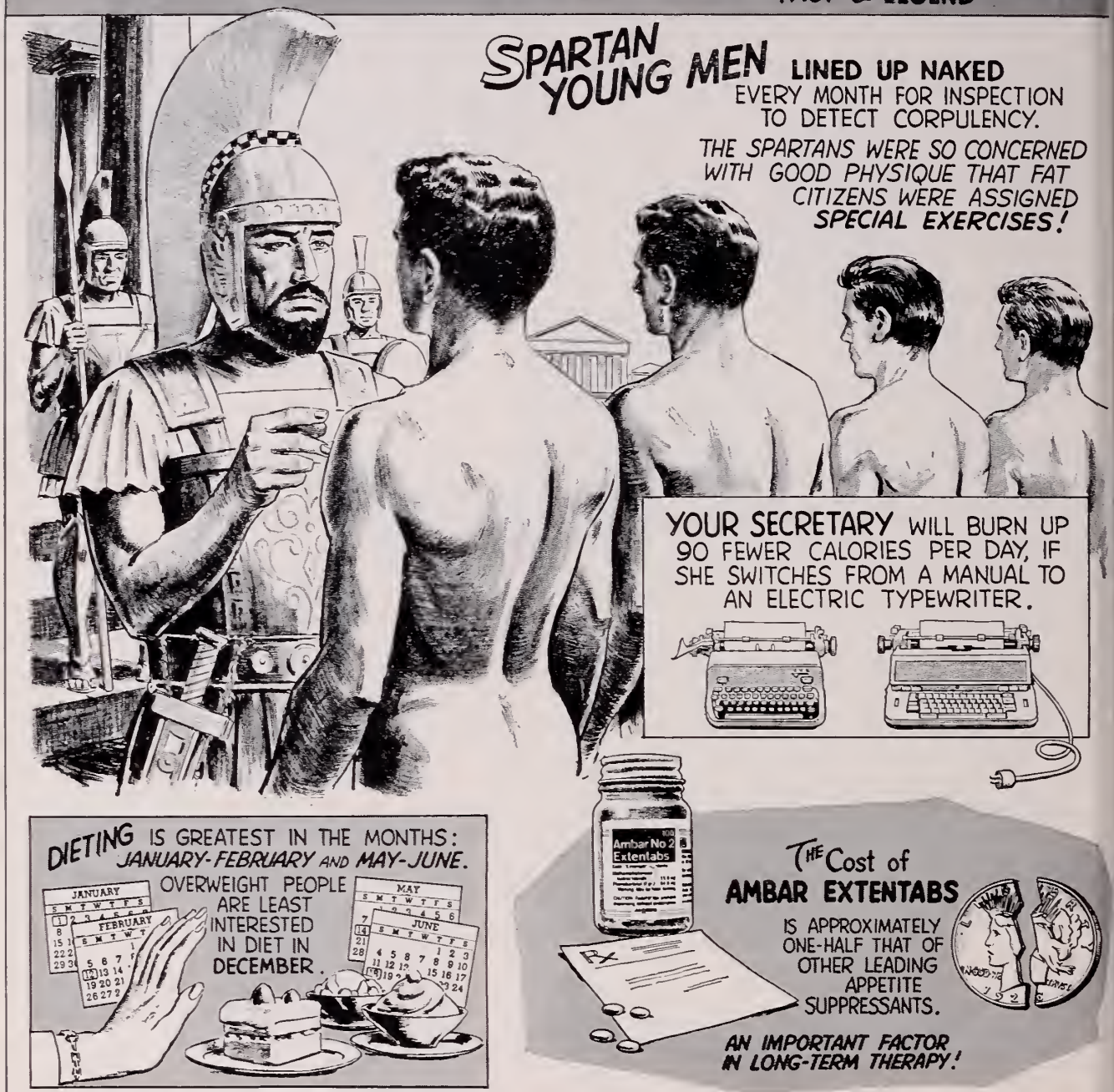
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Signs of the Times

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WILLIAM HAZLITT
THE ATLAS

Some of the things that are disturbing the even flow of routine matters incident to administration of your Association's business are listed for your information.

1. The suit by the osteopaths in Dade City against the county medical society for not allowing them to admit patients in the local hospital. Included as a defendant is the Florida Medical Association.

2. The continuing unfinished settlement with the Florida Industrial Commission regarding usual, reasonable and customary fees paid for compensation work.

3. The governmental reorganization by the legislature and the effect on health care services being rendered.

4. The effort to try to help a proper administration and implementation of the Medicaid law if it passes the legislature.

5. A continuing upgrading, improvement and modernizing of medical education in the state and continuing dialogue on the Millis report.

6. To continue the effort to modernize and make into law an improved Medical Practice Act.

There are multiple other problems at present, some of which (including the above) may be totally or partially resolved by the time this is printed.

However, all is not lost! One of the most refreshing and encouraging signs of the times, in my opinion, was the recent Young Peoples' Rally for Decency in Miami. Here was a spontaneous rebellion by the right kind of people—done quietly but effectively and without the help of adults, apparently. This could be the spark that ignites a wave of similar rallies throughout the country.

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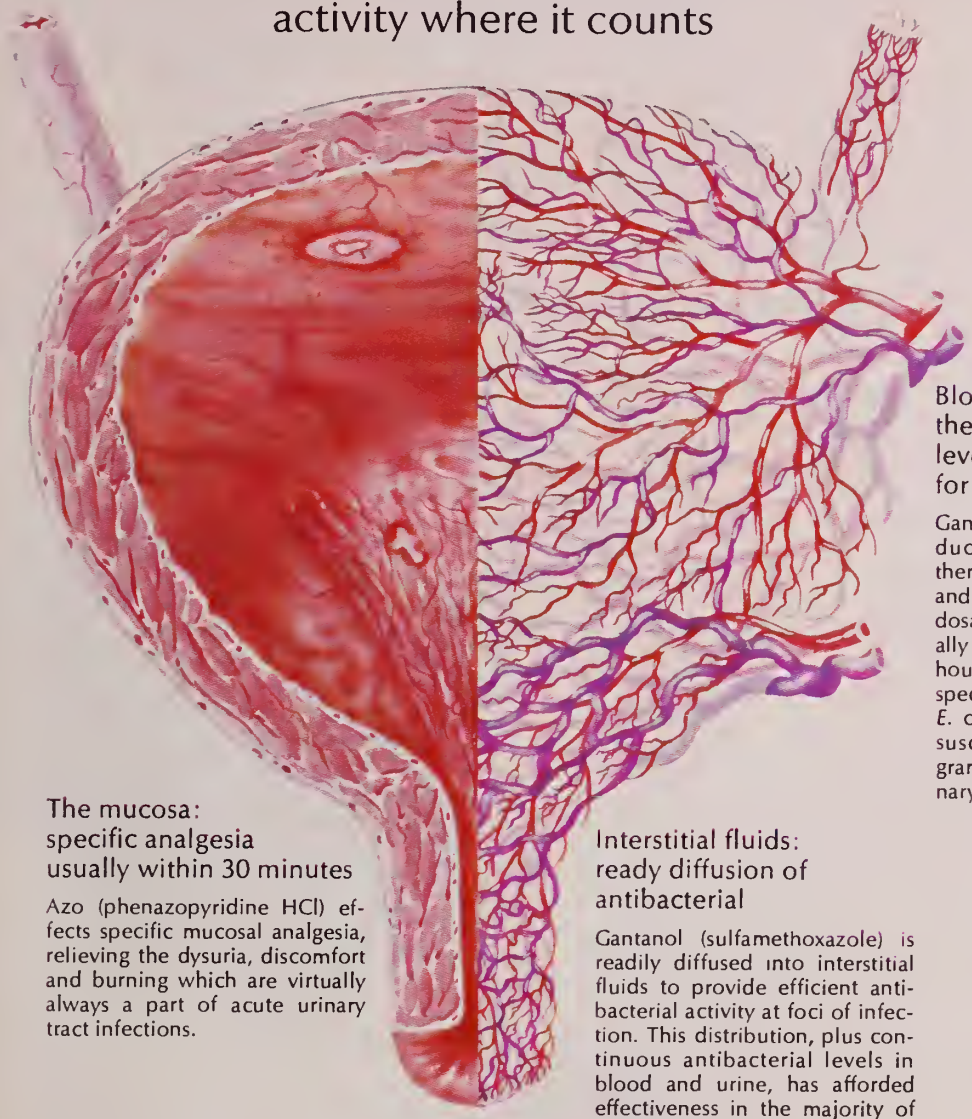
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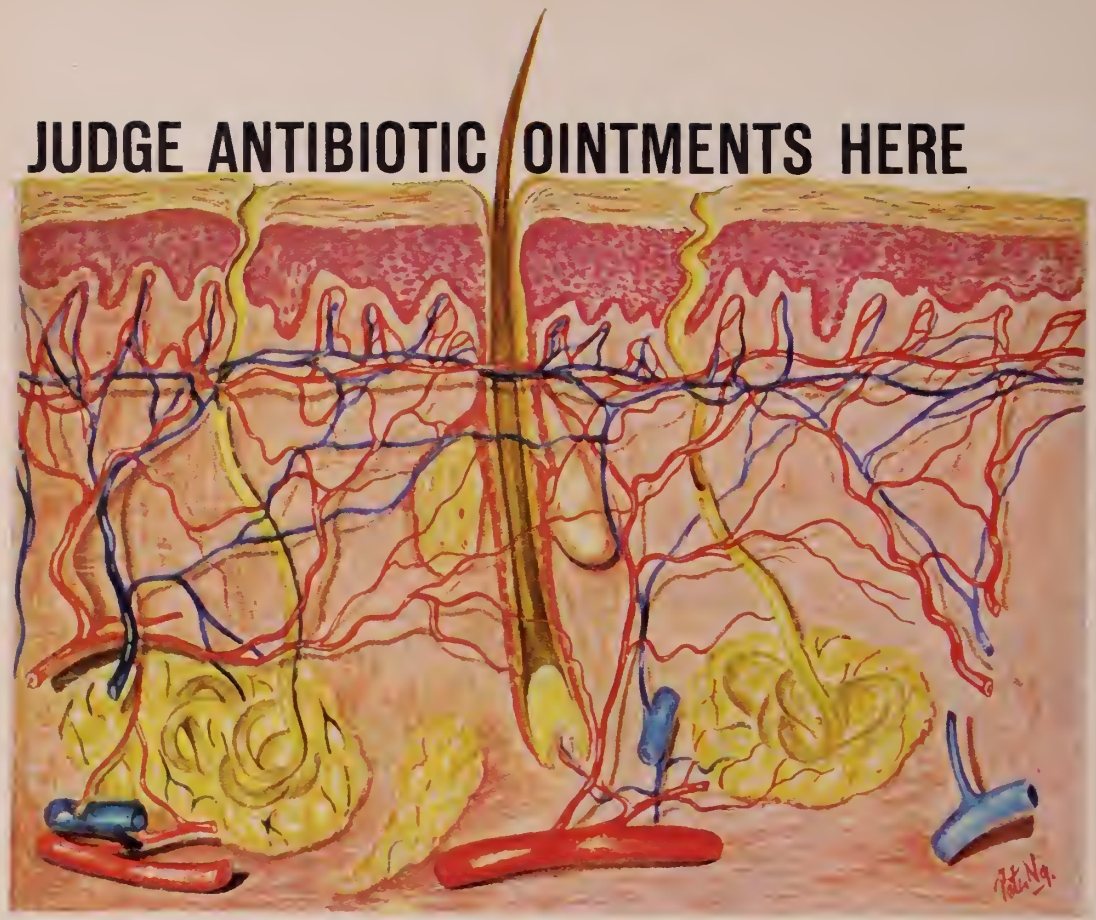
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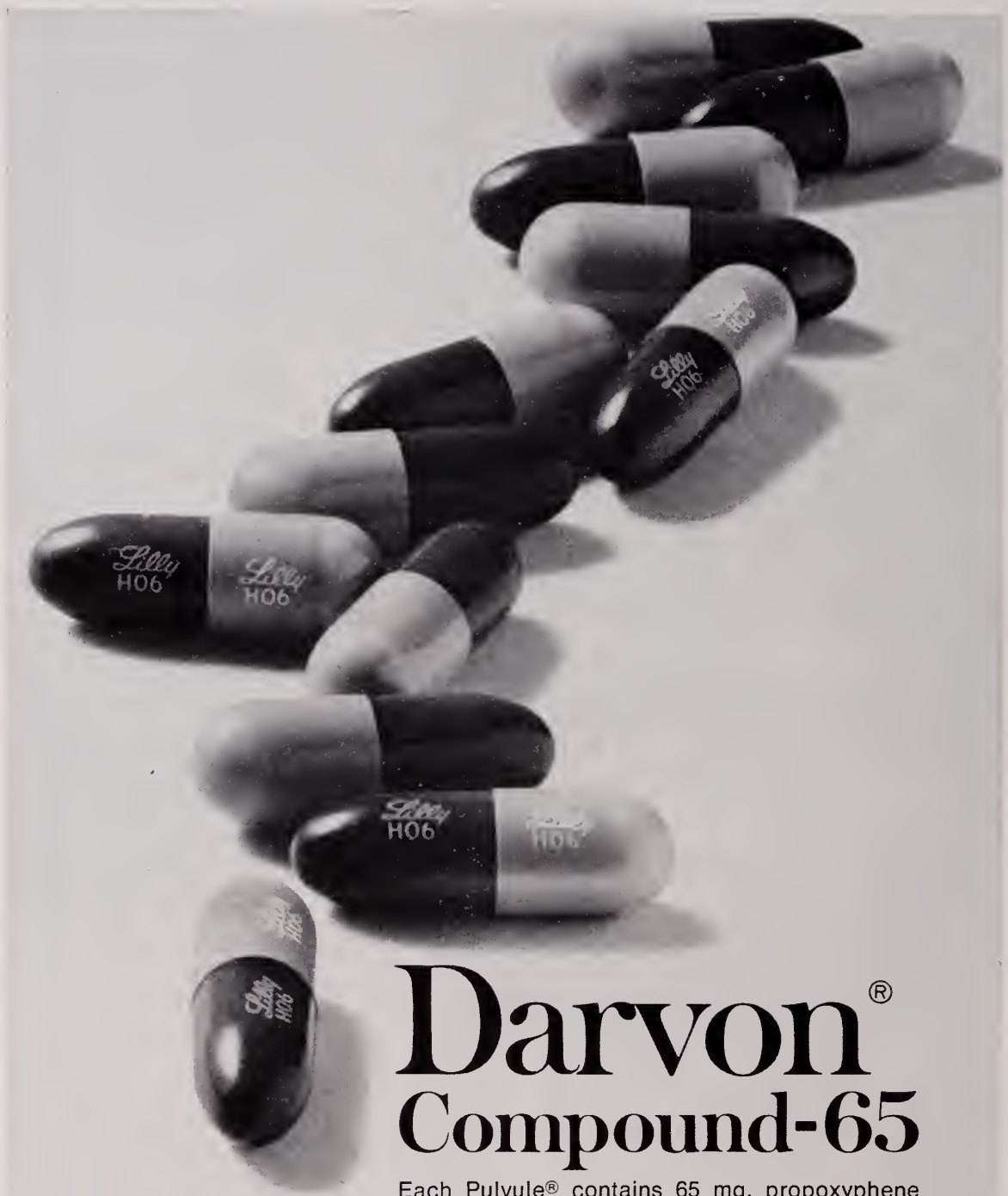
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The Arthritis Issue

David S. Howell, M.D.

It is significant that the entire scientific section of the Journal for this month is devoted to arthritis. Every doctor is confronted with "arthritis" in some way at some time. Many of us simply turn our backs on arthritis, because there is no single therapeutic measure sufficiently effective for dramatic response, the diagnostic measures are still relatively primitive due to incomplete knowledge concerning basic mechanisms of the some 80 diseases which the term arthritis encompasses, and day-to-day management is difficult due to the crippling nature of these diseases.

The papers in this scientific section have all been written by physicians who are especially interested in arthritis, and we are delighted that they have contributed to this issue.

These papers cover different aspects of the arthritis problem. For example, the study of gonococcal arthritis is the first one covering this large a series in the southern tip of the United States, and brings out a few interesting characteristics novel to the south Florida area. The study on systemic lupus erythematosus is also the first study with a four-year follow-up ever made at this latitude of the United States. Again there are some anomalous findings which require explanation. The study on dose-response curves in relation to a corticosteroid treatment is really the first study with this special design to assess how certain variables eclipse the expected anti-inflammatory response. The rather informal lecture on synovial fluid analysis displays a unique collection of crystals from human synovial fluid that are of practical value in office rheumatology and can be used for identifying joint diseases otherwise quite frustrating to pinpoint.

A problem not answered in this number is the best way of delivering health care to patients. The management of rheumatological problems, as in the past, is best handled by the family physician and aided by those who, like the authors in this issue, are specially trained in the field of rheumatology. Those specially trained may be physiatrists, orthopaedic surgeons, or most frequently, specialists in internal medicine. It is hoped that augmented interest in the field of arthritis and rheumatism in Florida will result from the presentation of these papers and that this and other such symposia will increase the number of physicians who become attached to this field.

Dr. Howell, University of Miami School of Medicine, Miami 33152.

Dr. Howell is professor of medicine, University of Miami School of Medicine.

Recent Clinical Experience in the Management of Gonococcal Arthritis

Roy D. Altman, M.D.

During the current era of antibiotics, especially penicillin, there has been a metamorphosis in the distribution and clinical picture of venereal diseases.[1,2] Despite efforts at wholesale eradication, these diseases are still prevalent and reportedly increasing in incidence. The clinical picture of gonococcal arthritis[3] has also changed. Formerly it was a disease uniformly common among young men, but is now, in non-military establishments, prevalent in women. Unfortunately, young women are liable to several other diseases which may present in a similar way so that establishment of the correct diagnosis is of great importance. Entities such as acute rheumatic fever, systemic lupus erythematosus, sarcoidosis, serum sickness, septic arthritis of other etiology, traumatic arthritis, arthritis associated with ulcerative colitis and psoriatic arthritis may at times present a difficult differential diagnosis. In a young man, Reiter's syndrome and ankylosing spondylitis would be strongly considered.

The charts of 31 patients with proven or suspected gonococcal arthritis-tenosynovitis seen at Jackson Memorial Hospital in the calendar year 1968 were reviewed and several aspects of management pointed out. Emphasis is placed on documentation by cultures.

Methods and Results

Cultures were obtained on admission to the hospital. Blood cultures were drawn in multiples of three at 10 to 20 minute intervals with different syringes and from different sites, and cultured in brain-heart infusion broth with paraaminobenzoate and agar media. Joint aspirates were plated at the bedside or hand-carried to the laboratory where it was plated on Thayer-Martin media enriched chocolate agar and immediately placed in a candle jar (CO_2). Urethral and cervical smears were made at the bedside and swabs sent to the laboratory for plating.

Dr. Altman is trainee, National Institute of Arthritis and Metabolic Diseases, arthritis division, department of medicine, University of Miami School of Medicine and Veterans Administration Hospital, Miami.

Despite the average youthful age of this series, the range is quite wide (Table 1). In one previous year, we diagnosed gonococcal arthritis in one patient 4 years old and another 56. The high female:male sex ratio reflects the change reported elsewhere in the literature since the advent of antibiotics. This feature is probably related to the prompt recognition and treatment of urethritis in males developed through persistent educational programs. The race distribution is perhaps skewed by our predominantly Negro hospital population.

Duration of symptoms prior to seeking hospitalization did not correlate well with results of culture; however, if symptoms lasted over 10 days, all cultures were found to be negative.

Table 1.—Overall Characteristics in the Series of Patients with Gonococcal Arthritis.

Age (years): Average 25.6; range 11-49

Age	No. Patients
11-16	2
17-24	17
25-32	5
33-40	4
41-49	3

Sex: 29 females; 2 males

Race: 28 Negro; 3 Caucasian (all female)

Duration of symptoms: Average 5.4 days; range 1-21 days

Joint areas involved:		
	Ankle and Foot	13 (25%)
	Knee	18 (34%)
	Wrist and Hand	22 (41%)

Length of hospitalization: Average 9.5 days; range 3-23 days

The joint involvement was most often reported as a migratory polyarthralgia, lasting for several minutes to several hours in any single joint; the total migratory period lasted for several minutes to several days. In the next phase, arthritis finally settled in one or two joints, with involvement of adjacent tendon sheaths, or bursae. Frequently, it was difficult to distinguish the wrist joint from dorsal extensor tendons of the hands or metacarpophalangeal joints as the initial site of inflammation. When the extensor tendons of the hands

were involved, the appearance was much like that of a cellulitis resulting from a variety of infectious or allergic etiologies. When only tendon sheaths were involved, aspirate cultures were difficult to obtain and almost never positive. It should be emphasized that uncommonly gonococcal arthritis presented to us as a solitary joint involvement. Most frequently when skin lesions were found, they were noted over areas of tendon or joint involvement. Prior and subsequent to the time limits of this study, hip and shoulder involvement have been rarely seen in this clinic.

The length of hospitalization was rarely under one week except when the patient left the hospital against medical advice. Hospitalization was lengthened by refractory cellulitis, persistent joint effusion, other concomitant disease, or when there was a delay in diagnosis. Most often patients were treated for seven to 14 days with parenteral antibiotics.

There were four pregnant women in this study (Table 2). This finding does not seem beyond our expectation, considering the incidence of pregnancy in the population at large in this age group. However, in our experience, almost all pregnant women who have presented at our center with an acute arthritis have revealed a gonococcal infection. Although not all our patients have had a clear-cut relationship of onset of symptoms to their menses, a close relationship, as stated in the literature,[4] does seem to exist. It should be emphasized that menopause (physiological or surgical) does not protect women from this affliction. They still have a susceptible urethra and Bartholin's glands, as well as other less commonly sites. Six of these patients had pharyngeal cultures for gonococci; all were negative. Several patients had urine cultures for gonococci, but only one was positive.

Table 2.—Findings on History and Physical Examination in Patients with Gonococcal Arthritis

Relation to estrus:		
Onset of joint symptoms within		
1 day of onset of menses	7	
2-4 days of onset of menses	4	
10-30 days of onset of menses	7	
3-8 weeks postpartum	3	
Pregnant (2 months to term)	4	
Post-physiological or surgical menopause	4	
History of previous gonococcal contact, infection or pelvic inflammatory disease: 10 positive (information available on 22 patients)		45%
Skin lesions on physical examination suggestive of gonococcemia (28 patients observed)		7
Pelvic examination (25 patients): Findings of purulent vaginal discharge, cervical or parametrial tenderness—16		64%
Pericarditis:		
Symptomatic	0	
ECG evidence of myopericarditis		
Definite	3	
Suspected	6	
ECG normal	6	
VDRL: Positive in 2 (both had history of lues)		

Pericarditis[5,6] due to gonococcus is reported and we have seen in previous years symptomatic cases. In these instances, the differential diagnosis with acute rheumatic fever becomes more complicated and this problem provides another reason for the need of early diagnosis.

The presence of suspected skin lesions[7,8] did not correlate with duration of symptoms or culture results (Figs. 1, 2). Only one of the skin lesions was smeared and cultured with negative results. A biopsy of these skin lesions was sent to the U.S. Public Health Service, Communicable Disease Center, Chamblee, Georgia, where a positive reaction was demonstrated when the biopsy was treated with fluorescent anti-gonococcal antibody.

As in a previous report, there was no correlation between the appearance of the joint fluid white cell count, the joint fluid sugar, and the presence of the organism by culture (Table 3).[9] Similarly, here, some joint fluids were clear, normal in appearance with a good mucin test, revealed a normal joint fluid sugar concentration and grew Neisseria gonococcus on culture. There were certainly definite points to be gained from the aspirate. The presence of a septic arthritis is strongly suspected in a joint fluid with a purulent appearance, high white cell count or a low sugar. Gram-stained smears, although uncommonly positive, were examined in the hope of finding an occasional case where the diagnosis can be made on the initial work-up (Fig. 3).

Others have emphasized the difficulty of documentation of this condition by culture. More recently it is becoming appreciated that the diagnosis can be established more often than previously reported. Indeed, our figures suggest that only about one quarter of the cultures taken are positive, but by obtaining more than one type of culture in groups we were able to document the presence of this organism in nearly 60% of the cases in which cultures were obtained (Table 4).

Systemic manifestations such as fever, chills and elevated peripheral white cell count were variable and not diagnostically helpful either in our experience or that recorded in recent literature.[3]

General Comments

In addition to joint fluid examinations and cultures previously discussed, a useful tool to aid in diagnosis was an interview with the sexual partner. A positive history from him (or her) of a treated or untreated urethral discharge was, in three instances, of more value than a positive culture three to four days later. Also, in one case where this partner's history was negative for gonorrhea, his urethral smear was positive. It is concluded that more definite diagnoses could have been established in this manner.



Fig. 1. — Extensor surface of forearm of 18-year-old Negro female with wrist pain. Note umbilicated lesions with violaceous borders. Cultures from a blood and wrist joint aspirate grew gonococci.



Fig. 2. — A magnified view of Figure 1 demonstrates clear vesicles as well as hemorrhagic and necrotic umbilicated lesions. These lesions healed without scarring.

TABLE 3.—CHARACTERISTICS OF THE JOINT FLUID IN GONOCOCCAL ARTHRITIS

Appearance:	Purulent	11
	Cloudy	9
	Clear	6
	Bloody	1
	Not recorded	4

Cell count (10 patients): 400-116,000 WBC/ml.; in all differential counts PMN> 70%.

Cell count - WBC/ml.	No. Patients
0- 1,000	1
1,000- 10,000	4
10,000- 20,000	1
20,000- 40,000	2
40,000-116,000	2

Sugar (9 patients):

mg./100 ml.	No. Patients
15-30	2
30-60	1
Over 60	6

TABLE 4.—RESULTS OF MULTIPLE CULTURES FOR GONOCOCCI IN 29 PATIENTS

Type of culture and results:

	Total Patients Cultured	Positive Cultures (# Pts.)
Blood	20	3 (15%)
Joint	28	8 (29%)
Cervix	20	7 (35%)
Urethra	1	1 (100%)
(Cervical smear)		(5)*

*Three were documented by culture

Proven cases of gonococcal arthritis:

Definite: 10 (32%)–culture positive in blood and/or joint

Probable: 7 (23%)–culture positive of cervix or urethra

Suspected: 14 (45%)–culture negative or not performed; suggestive history and physical findings; cervical smear positive only; prompt response to penicillin

19 positive cultures of 69 obtained–(28%)

Cultures positive in 17 of 29 patients in whom 1 or more cultures were obtained–(59%)

Systemic Therapy

Inasmuch as gonococci cause a septic arthritis, treatment was considered a medical emergency demanding hospitalization. Penicillin was given in 28 of the patients at doses of 2.4 to 4.8 million units per day. Attempts at treatment with benzathine penicillin were unsuccessful. Our standard dosage for this series was 600,000 units of procaine penicillin intramuscularly every six hours for seven to 14 days. All patients in this study demonstrated dramatic response in 24 to 36 hours. We have been alerted to invading penicillin-resistant gonococcal strains from the Far East[10] but

have not yet locally encountered this problem. If, in the continued study of these patients, one fails to respond significantly in 48 hours, we would recommend 10 to 20 million units of intravenous penicillin per day or another antibiotic, and a re-evaluation of the patient for the possibility of another diagnosis. Of the three patients with a history of penicillin allergy, erythromycin (2) and tetracycline (1) in oral doses of 2 Gm. per day led to a less dramatic but as complete a response.

The initial response was most often followed by a three- to four-day gradual improvement to full resolution of pain, heat and swelling, and improvement in range of motion. On occasion, swelling and limitation of motion persisted. For example, there were a few instances of persistent effusion of the knee in spite of repeated aspirations. This effusion inevitably became clear in appearance with time, but seemed to reform as a result of reactive synovitis. In more instances there was persistent swelling with some pain on the dorsum of the hand. This was perhaps related to its distal location and related circulation. Both of these entities seemed to respond to various types of anti-inflammatory medication. Five of our patients received salicylates, Indocin, phenylbutazone, and local corticosteroid derivatives for this reason. Overall, phenylbutazone seemed most effective.

Local treatment included splinting of the afflicted part, especially if the wrist and hand were involved.

Joint irrigation, especially of a knee, with a sterile solution such as injectable saline or lidocaine, was used at intervals to wash out purulent materials which contain proteolytic enzymes as well as bacteria and numerous white cells. This combination of material in the enclosed joint space is quite liable to destroy cartilage. Removal of these materials is essential if mechanically feasible.

Case Report

A 19-year-old Negro female prima gravida presented in her sixth month of pregnancy with migratory arthralgias that had settled in the left wrist one day previously. She denied any recent sexual contact or previous arthritis. No skin lesions were noted. The left wrist was swollen with a diffuse, tender cellulitis over the dorsum of the left hand. There was a heavy, yellow vaginal discharge with minimal cervical tenderness. Aspiration of the left wrist joint yielded 1 ml. of purulent appearing fluid that demonstrated gram negative diplococci on smear (Fig. 3) and subsequently cultured Neisseria gonococcus. She responded well to parenteral penicillin and in ten days was discharged from the hospital. She delivered a premature viable child two months later without complications.

A 23-year-old sister of the patient presented six months later with knee pain of seven days duration. She was one month postpartum and complained of some lower abdominal cramping. Her skin was clear and the right knee was quite swollen, hot and tender. There was a thick, yellow vaginal discharge and parametrial tenderness. Aspiration of her knee revealed a turbid fluid that subsequently grew Neisseria gonococcus. She responded well to penicillin and was discharged in 14 days. The only complication was a reactive synovitis of her knee that responded quickly to Indocin, 25 mg. q.i.d.

The patient, now 20 years old, presented again six months later with pain in her right ankle for three days, one day after the start of her menses, and a migratory arthralgia. Her right ankle was swollen, hot and tender. There was a yellow, purulent vaginal discharge that was smeared and revealed many white blood cells with intra- and extracellular paired gram negative diplococci. Cultures of joint and blood were negative. She responded quickly to penicillin and was discharged in ten days. Protein electrophoresis was within normal limits.

Recurrent attacks of gonococcal arthritis are uncommon. By way of speculation, perhaps the previous therapy prevented development of adequate antibodies,[11] or perhaps the patient's antibodies to this organism were in some manner ineffective. The fact that the sister had the same disease may reflect their sociologic position and possibly an additional factor of congenital susceptibility.

Summary

From the charts of 31 patients with suspected gonococcal arthritis seen at Jackson Memorial Hospital during 1968, the behavior of this disease and response to treatment were analyzed.

After a variable migratory phase, the arthritis usually settled in more than one joint and/or tendon sheath. There was a positive correlation of onset of menses to onset of arthritis in most patients. Acute arthritis during pregnancy in this

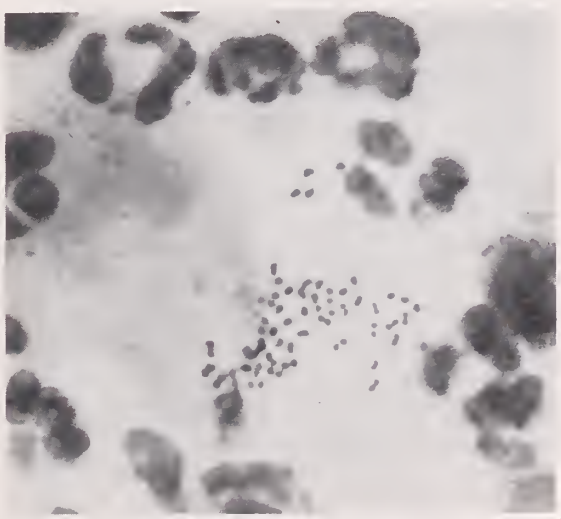


Fig. 3. — Gram-stained smear of left wrist aspirate of 19-year-old Negro female as described in the case report shows gram-negative paired diplococci that cultured as N. gonococcus.

population was considered gonococcal until proven otherwise. Surgical or physiological menopause did not protect the patient from gonococcal arthritis. About half the patients with gonococcal arthritis gave a history suggestive of previous gonococcal infection and a pelvic examination was suggestive of gonococcal infection on admission.

Although only one quarter of the total cultures obtained were positive, by obtaining blood, joint and cervical cultures nearly two-thirds of patients in whom cultures were obtained revealed cultural evidence of gonococcal infection.

All patients with gonococcal arthritis were admitted to the hospital and received joint aspirations and irrigation when feasible, as well as supportive splints and analgesia. They all responded to intramuscular penicillin or other antibiotics as indicated. No instances of resistance to penicillin have yet been encountered.

References

1. Grabar, W. J. III; Sanford, J. P., and Ziff, M.: Sex Incidence of Gonococcal Arthritis, Arth. Rheum. 3:309, 1960.
2. Burbacher, C. R. and Weiland, A. H.: Gonorrheal Arthritis, J. Florida M. A. 24:433-436 (Feb.), 1938.
3. Ford, D. F.: Gonococcal Arthritis. J. L. Hollander (ed.), Arthritis and Allied Conditions, ed. 7, Philadelphia, Lea and Febiger, 1966, p. 995.
4. Goobar, J. E. and Clark, G. M.: Rheumatological Manifestations of Gonorrhea, A.I.R. 7:1, 1964.
5. Vietyke, W. M.: Gonococcal Arthritis with Pericarditis, Arch. Int. Med. 117:270, 1966.
6. Shapiro, E.; Lipkis, M. L.; Kahn, J., and Heid, J. B.: Electrocardiographic Changes in Acute Gonococcal Arthritis and Myocarditis Simulating Acute Rheumatic Polyarthritis, Am. J. M. Sc. 217:300, 1949.
7. Abu-Nassar, H.; Hill, N.; Fred, H. L., and Yow, E. M.: Cutaneous Manifestations of Gonococcemia: Review of 14 Cases, Arch. Int. Med. 112:731, 1963.
8. Keiser, H.; Ruben, F. L.; Wolinsky, E., and Kushner, I.: Clinical Forms of Gonococcal Arthritis, New England J. M. 279:234, 1968.
9. Partain, J. O.: Cathcart, E. S., and Cohen, A. S.: Arthritis Associated with Gonorrhoea, Ann. Rheum. Dis. 27:156, 1968.
10. Montgomery, M.: Acute Gonococcal Arthritis, Disease-a-Month, pp. 10-12 (June) 1968.
11. Hess, E. V.; Hunter, D. K., and Ziff, M.: Gonococcal Antibodies in Acute Arthritis, J.A.M.A. 191:531, 1965.

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Synovianalysis

An Aid to Diagnosis of Rheumatic Diseases

Norman Gottlieb, M.D.

The subject to be discussed is joint fluid examination, referred to as synovianalysis.[1] This procedure, coupled with blood tests and x-rays, form the critical cluster of tests used in the evaluation of arthritic diseases. Synovial fluid mirrors the pathology of joint diseases much the same as urinary sediment reflects kidney abnormalities, and synovianalysis can be as simple and as useful as routine urinalysis. The importance of joint fluid examination is not limited to disease diagnosis but is helpful in understanding and correlating joint anatomy, histology, and cytology with relevant physiological events. Joint fluid analysis has contributed importantly to the upsurge of accurate diagnoses of arthritic and rheumatic diseases within the past decade.[2-4] If joint effusion is present, fluid aspiration and synovianalysis should always constitute a part of the basic workup.

Technique of Joint Aspiration

A knowledge of the anatomy of each joint and neighboring structures is essential for proper aspiration. The various approaches to arthrocentesis of individual joints is well illustrated in standard texts and elsewhere and will not be dwelt upon here.[5,6] Aseptic technique should be observed. Following cleansing of the site with a topical antiseptic, the skin is sprayed with ethyl chloride solution. A 10 cc. syringe or larger is employed, and a 20-gauge needle is adequate for removal of all but the most tenacious fluids. Disposable needles and syringes reduce the danger of iatrogenic infection. Lidocaine may be infiltrated into the skin and deeper tissues to provide local anesthesia. With every joint aspiration, all available fluid should be removed. Following aspiration, the skin is dried and a bandage applied. Patients are permitted to return to their former level of activity upon completion of the procedure.

The knee joints are tapped most frequently, but most other large joints are readily accessible. The hip joint, being deep and adjacent to vital structures, is technically more difficult to aspirate. Synovial fluid may be obtained from the small joints of the body usually in minute quantities but occasionally of paramount significance.

Of major concern to physicians is the fear of introducing infection. However, large experience from many clinics, including our own, has shown the incidence of iatrogenic infection to be less than one case in 7,000 procedures. Joints should not be aspirated if there is existing infection of the skin or subcutaneous tissues or in the presence of an uncontrolled bleeding diathesis.

Gross and Microscopic Anatomy and Physiology of Synovial Joints

Diarthrodial joints are specialized to permit more or less free movement. They possess a cavity which contains a small amount of synovial fluid. The articular surface of bone is lined with hyaline cartilage. A strong fibrous capsule uniting the two bones is lined by a vascular connective tissue, the synovial membrane from which synovial fluid derives.

The synovium is composed of connective and adipose tissues which are richly vascularized. There is a layer of lining cells one to three deep (20-40μ) which faces the joint cavity. Long cytoplasmic processes exist to present a large surface area to the joint. Synovial villi formation is prominent, normally being leaf-shaped, fan-shaped or of the folded variety.[7]

With the aid of electron microscopy, two types of synovial lining cells may be differentiated, A and B.[8] These are intermixed and lie embedded in an amorphous matrix probably composed partially of hyaluronate, which separates one cell from the other. The type A cell is the most common. It contains numerous vacuoles which may be related to phagocytosis and has smooth endoplas-

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mic reticulum, well-developed Golgi apparatus, and filopodia. The type B cell is rich in rough endoplasmic reticulum and is probably responsible for large molecule synthesis. Fewer vacuoles and filopodia are present and the Golgi apparatus is less extensive.

Synovial cells have three prime functions. The first is joint lubrication. Normal synovial fluid provides a nearly perfect frictionless film over which the articular surfaces glide. The high viscosity of this fluid is due largely to hyaluronate and to the polymerized hyaluronate-protein complexes. These long chain molecules lubricate well with rapid or slow joint motion. A constant film of fluid separates articular surfaces, thereby minimizing attrition of articular cartilage. The second function is joint nutrition. Articular cartilage is nourished primarily by synovial fluid. Lastly, synovial cells aid in removal of cellular and molecular debris by phagocytosis.

The constituents of synovial fluid are derived by dialysis from the plasma and by synthesis from synovial cells, which manufacture the mucopolysaccharide, hyaluronate. Small molecules tend to be in similar concentrations in blood and synovial fluid (e.g., uric acid), while large polymers (e.g., blood proteins) are in lesser quantity in synovial fluid. Fibrinogen, for example, is not normally present in joint fluid. This accounts for the failure of normal joint fluid to clot.

Normal synovial fluid is slightly alkaline, clear yellow, and viscous—much like egg white. Few cells are present, usually less than 200/cu. mm., mostly mononuclear. The amount is variable, depending upon which joint is tapped and the patient's age. Glucose content is the same as in blood if specimens are obtained in the fasting state. There is approximately one third as much protein in the synovial fluid as there is in whole blood; about 70% is albumin.

Synovial Fluid Examination

Following arthrocentesis, it is important to note the gross appearance of the fluid and record the quantity, color and clarity. The viscosity is determined with the aid of an Ostwald viscometer, although an accurate estimation may be obtained by a simple string test. This is performed by allowing the fluid to drip slowly from a syringe, or by placing a drop of fluid on the index finger, touching it with the thumb (use glove) and then separating the digits (Fig. 1). Normally the string will be greater than 4 cm. before breaking. Viscosity, almost entirely a function of hyaluronate, increases exponentially relative to increasing concentrations of hyaluronate. Reduction may be obtained by precipitating the hyaluronate with various acids, by hydrolytic degradation with certain enzymes, or by physical processes, such as ultrasound. With inflammatory diseases there is generally a reduction in synovial fluid viscosity.

The mucin clot, or Ropes Test, is similarly dependent on the hyaluronate content and character. A few drops of synovial fluid are added to a few milliliters of 5% acetic acid in a test tube, causing the proteinpolysaccharide complex (mucin) to precipitate. In normal and osteoarthritic fluids a firm clot forms that will not separate or shed on shaking. In active inflammatory disease, such as rheumatoid arthritis (RA), gout or septic arthritis, polymerization of hyaluronate is decreased and only a cloudy solution may form or a friable clot which will shed or fracture upon shaking. Inasmuch as both viscosity and mucin precipitate are dependent upon similar constituents, fluids that exhibit poor viscosity usually form poor mucin clots.

The number of leukocytes per cubic millimeter may be determined in a counting chamber, but the usual counting fluid is unsatisfactory because it is acidic in nature, coagulates the mucin and traps leukocytes in its mesh. Isotonic saline may be used for this purpose and the differential count

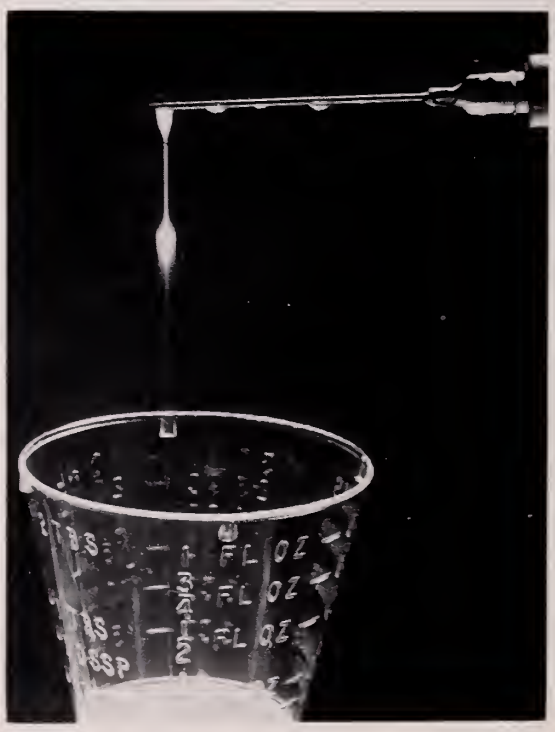


Fig. 1. — String sign in degenerative arthritis. Note tenacious strand, absent in acute arthritides.

performed using Wright's stain. All arthritic conditions are associated with a leukocytosis; the more acute the state, the more polymorphonuclear leukocytes are present.

Synovial fluid for glucose determination should be obtained in the fasting state, as there is a normal delay of glucose equilibrium between the blood and the joint compartments. A simultaneous blood specimen should be sent to the laboratory. Markedly decreased glucose values in synovial fluid are commonly found in septic processes, but other inflammatory arthritides may at times have low levels. Hyperplastic synovial cells, leukocytes, microorganisms, or change in synovial membrane or capillary transfer may be responsible for depressed glucose values.

Smears should be obtained and cultures performed for bacteria and fungi whenever there is the clinical suspicion of infectious arthritis.

The rheumatoid factor should be determined in the synovial fluid or in the extracts of synovial cells, using the same technique as for serum. In most instances the factor in synovial fluid will parallel the serum factor.

Microscopic examination should be performed on a drop of fresh, uncentrifuged fluid placed on a clean slide and enclosed with a cover slip. Crystals of various types, sodium urate, calcium pyrophosphate, cholesterol, oxalate and steroid may be identified. Cartilage fragments, collagen fibrils, cytoplasmic inclusion granules, fibrin strands, pyramidal bodies, macrophages and synovial cells at times may be seen.

Joint fluid hemolytic complement levels are markedly elevated in Reiter's syndrome, while being depressed in RA and systemic lupus erythematosus.

Synovial Fluid Findings in Disease States

Gout

The gross appearance of gouty synovial fluid is variable. Most commonly it is greenish-yellow and turbid, although on occasion it may be clear, chalky, bloody, or even purulent in appearance. The white blood cell count ranges from 1,000 to 70,000 or more, with a mean of 13,500 per cubic millimeter. Most are polymorphonuclear leukocytes in the acute attack. Both the mucin clot and the string sign are usually poor. Glucose determinations are most frequently in the normal range but at times may be strikingly depressed.

The identification of sodium urate crystals by microscopic examination of a drop of fresh unstained synovial fluid should be possible in more than 95% of cases.[9] They are usually seen within a few moments but at times may require 15 minutes of careful observation. In some instances crystals will be abundant, while in others prolonged examination results in only a single crystal being found. Crystals may be intra- and/or extracellular in location, but a greater proportion are intracellular during acute attacks (Fig. 2).

A number of other substances may be confused at times with sodium urate crystals because of similar appearance. Calcium pyrophosphate, fibrin, collagen fibrils, and various steroid crystals from previous intra-articular injections are the most common causes of false positive identification. (Figs. 3, 4)



Fig. 2. — Acute gouty arthritis. Intra- and extracellular rod and needle-shaped sodium urate crystals.

Pseudogout

Pseudogout is another "crystal-induced" arthritis whose diagnosis may be definitively established by microscopic examination of unstained synovial fluid. Calcium pyrophosphate crystals are found intra- and/or extracellular in location.[10] These crystals have several distinct forms: needle, rod, and rhomboid-shaped, as well as fragments of many configurations. The finding of rhomboid forms is most helpful as this clearly differentiates pseudogout from gout (Fig. 5).

Another method for distinguishing urate from pyrophosphate crystals entails the use of a polarizing light microscope. Urate crystals are negatively bi-refringent whereas pyrophosphate crystals are positively bi-refringent. Two chemical methods are available for differentiating these crystals. One involves the addition of uricase,

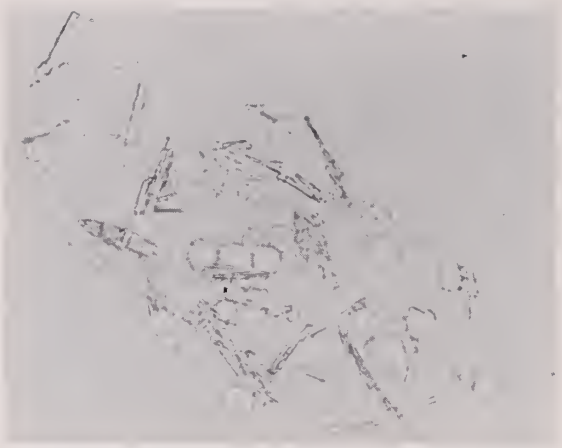


Fig. 3. — Betamethasone (Celestone Soluspan) crystals found in recently injected joint. Note morphological similarity to urate crystals.



Fig. 4. — Intra-articular steroid injection (Prednisolone tertiary-Butylacetate) was the cause of this acute monoarticular arthritis. The intracellular steroid crystals may lead to a diagnosis of gouty arthritis.



Fig. 5. — Pseudogout. Typical intracellular rhomboid-shaped calcium pyrophosphate crystals.

which digests urate crystals only; the other consists of increasing the pH to 9, which dissolves the urate but does not affect the pyrophosphate crystals.

Reiter's Syndrome

Reiter's syndrome is a disease of young males consisting of arthritis, urethritis, conjunctivitis and mucocutaneous lesions. It is frequently confused with gonococcal arthritis, gout, sarcoidosis or one of the collagen-vascular diseases.

Two features of synovial fluid examination are helpful in establishing its diagnosis.[11] The first is elevation of the hemolytic complement (C′) level which is invariably greater than 140 $C'H_{50}$ units. In one study the mean complement level for all cases of Reiter's syndrome was 170 units. This compared to 43 units for patients with RA and 102 units for gouty patients. Reasons for the elevation of synovial complement are uncertain, but they may relate to higher blood complement levels (325 in Reiter's syndrome, 220 in RA, 280 in gout) or to the greater severity of joint inflammation.

The second significant finding is giant macrophages containing numerous vacuoles and cytoplasmic granules and one or more intact polymorphonuclear leukocytes (Fig. 6). They are infrequent, occurring in 1%-3% of the total leukocyte population. Some authors believe these cells are pathognomonic of Reiter's syndrome; others have documented similar to identical cells in a variety of joint diseases.[12] In my opinion, these cells are not specific for Reiter's syndrome.

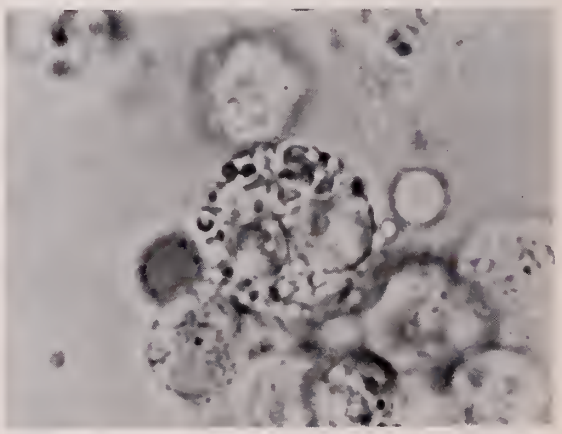


Fig. 6. — Reiter's syndrome. Giant macrophage with cytoplasmic inclusion granules and two ingested polymorphonuclear leukocytes.

Rheumatoid Arthritis

Although there are no diagnostic fluid findings in RA, a number of features are helpful in supporting the clinical diagnosis. RA cells, or ragocytes, are polymorphonuclear leukocytes with cytoplasmic inclusions that occur with a frequency of 5%-95% of the total cell population.[13] Using cell maceration or fluorescent staining techniques, the inclusions have been found to consist of gamma globulin-rheumatoid factor complexes. However, the synovial effusions of many other arthritides contain cells of identical morphologic appearance.[14]

While a poor mucin clot frequently is a feature of rheumatoid fluid, many such fluids will clot normally. Also, a poor mucin clot is not specific for RA and may be a feature of any inflammatory arthritis. The importance of this finding is demonstrated by its inclusion on the American Rheumatism Association's criteria for the diagnosis of RA.

A small number of rheumatoid patients will have cholesterol crystals in their synovial fluid.[15] These may be readily identified by their distinctive morphology, being rhomboid-shaped with one or more notches in the corners (Fig. 7). The significance of the presence of cholesterol crystals is unclear at this time.

Pyramidal bodies are small objects 0.5 - 1.5 μ in diameter which have been described in RA, but not as yet in any other arthritic diseases.[16]

Rheumatoid factor can be demonstrated both in synovial fluids and synovial cell extracts. While most patients have rheumatoid factor in serum and synovial fluid in varying titers, some few will be synovial fluid positive and serum negative.[17] This may be an important diagnostic clue in the early diagnosis of RA upon occasion.

Deoxyribonucleic acid particles in white blood cells, free, and adhering to cell membranes, have also been noted in RA.[18] Approximately 1%-2% of white blood cells contain these particles. Their presence correlates positively with rheumatoid factor and long-standing or severe articular disease.



Fig. 7. — Cholesterol crystals occasionally found in rheumatoid synovial fluid. Note the notched corners of the cholesterol crystals.

Traumatic Arthritis

Synovial fluid from a traumatized joint may be clear, turbid, serosanguinous, or grossly blood. Few white blood cells are present, usually less than 2,000 per cubic millimeter. The number of red blood cells varies between few and numerous. Viscosity and mucin clot are good. The presence of bloody synovial fluid is not diagnostic of traumatic arthritis, however, as such fluid may be encountered with bleeding diatheses (especially hemophilia), tumors, pigmented villonodular synovitis and neuropathic joint disease. Streaks of bright red blood in the aspirate are usually indicative of a traumatic tap.

Septic Arthritis

A definitive diagnosis of septic arthritis can be established only if microorganisms are present on gram stain or culture of the synovial fluid; however, in some instances of almost certain infection these tests are negative. False positive results may occur from contaminated specimens.

Additional findings supporting this diagnosis include pus-like appearance, white blood cell count greater than 50,000, and depressed glucose level.

Degenerative Joint Disease

Fluid from an osteoarthritic joint is most commonly light yellow or honey-colored and transparent. Few white blood cells are present, viscosity is good, string sign is 4 cm. or longer, and a firm clot is formed upon addition of fluid to acetic acid. Often, cartilage fragments and collagen fibrils will be seen on microscopic examination.

In severe degenerative disease, or when a superimposed inflammatory component is present, an entirely different picture may emerge. The synovial fluid may then resemble a severe inflammatory arthritis or mimic a bloody traumatic process.

Summary

The purpose of this paper is to emphasize the importance of synovianalysis in understanding the pathophysiology of arthritic diseases as well as its use to promote accurate diagnosis. The major joint fluid findings in gout, pseudogout, Reiter's syndrome, rheumatoid, traumatic, septic and degenerative arthritis have been reviewed.

References

1. Hollander, J. L.; Jessar, R. A., and McCarty, D. J.: Synovianalysis: An Aid in Arthritis Diagnosis, Bull. Rheum. Dis. 12:263, 1961.
2. Hollander, J. L.; Reginato, A., and Torralha, T. P.: Examination of Synovial Fluid as a Diagnostic Aid in Arthritis, Med. Clin. N. America 50:1281 (Sept.) 1966.
3. Schmid, F. R. and Ogata, R. I.: Synovial Fluid Evaluation in Joint Disease, Med. Clin. N. America 49:165 (Jan.) 1965.
4. Ropes, M. W. and Bauer, W.: Synovial Fluid Changes in Joint Disease, Cambridge, Mass., Harvard University Press, 1953.
5. Pruce, A. M.; Miller, J. A., and Berger, I. R.: Anatomic Landmarks in Joint Paracentesis, Ciba Clinical Symposia 16:19, 1964.
6. Hollander, J. L.: Intrasynovial Steroid Therapy. Chapter 25 in Arthritis and Allied Conditions, J. L. Hollander, editor, Philadelphia, Lea and Fehiger, 1966.
7. Palmer, D. G.: Synovial Villi: An Examination of These Structures Within the Anterior Compartment of the Knee and Metacarpo-phalangeal Joints, Arth. Rheum. 10:451 (Oct.), 1967.
8. Williamson, N.; James, K.; Ling, N. R., and Holt, L. P.: Synovial Cells, A Study of the Morphology and an Examination of Protein Synthesis of Synovial Cells, Ann. Rheum. Dis. 25:534 (Nov.) 1966.
9. McCarty, D. J. and Hollander, J. L.: Identification of Urate Crystals in Gouty Synovial Fluid, Ann. Int. Med. 54:452 (March) 1961.
10. McCarty, D. J.; Kohn, N. N., and Faires, J. S.: Significance of Calcium Phosphate Crystals in the Synovial Fluid of Arthritic Patients: The "Pseudogout Syndrome," Ann. Int. Med. 56:711 (May) 1962.
11. Pekin, T. J.; Malinin, T. I., and Zvaifler, N. J.: Unusual Synovial Fluid Findings in Reiter's Syndrome, Ann. Int. Med. 66:677 (April) 1967.
12. Tagasugi, K. and Hollingsworth, J. W.: Morphologic Studies of Mononuclear Cells of Human Synovial Fluid, Arth. Rheum. 10:495 (Dec.) 1967.
13. Hollander, J. L.; McCarty, D. J.; Astorga, G., and Castro-Murillo, E.: Studies on the Pathogenesis of Rheumatoid Joint Inflammation. I. The "R. A. Cell" and a Working Hypothesis, Ann. Int. Med. 62:271 (Feh.) 1965.
14. Sones, D. A.; McDuffie, F. C., and Hunder, G. G.: Clinical Significance of the R. A. Cell, Arth. Rheum. 11:400 (June) 1968.
15. Zuckner, J.; Uddin, J.; Gantner, G. E., and Dorner, R. W.: Cholesterol Crystals in Synovial Fluid, Ann. Int. Med. 60:436 (March) 1964.
16. Bachman, D. M.: Pyramidal Bodies in R. A. Synovial Fluid, Arth. Rheum. 10:79 (Feh.) 1967.
17. Rodnan, G. P.; Eisenbeis, C. H. Jr., and Creighton, A. S.: The Occurrence of Rheumatoid Factor in Synovial Fluid, Am. J. Med. 35:182, 1963.
18. Pekin, T. J.; Malinin, T. I., and Zvaifler, N. J.: The Clinical Significance of Deoxyrihonucleic Acid Particles in Synovial Fluid, Ann. Int. Med. 65:1229 (Dec.) 1966.

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Articular Sporotrichosis

Report of Case Mimicking Rheumatoid Arthritis

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In recent years the importance of mycotic infections has become apparent in all fields of medicine. The increased frequency of various fungal infections of bone and joints is no exception. In spite of the fact that recognition is becoming common, unfamiliarity with mycotic infections as a cause of chronic bone and joint disease often causes diagnosis to be made only by serendipity, or when the disease has become well established and far advanced.

Sporotrichosis is a subacute and chronic fungal infection in man characteristically manifesting itself chiefly in superficial and deep tissues. Since the causal agent was first identified by Schenk in 1898,[1] the disease has become well established as an occupational hazard of nurserymen, gardeners and allied occupations.

The present report describes a patient with sporotrichosis involving not only the skin but also both knees and wrists, which caused confusion with rheumatoid arthritis for a period of over two years.

Case Report

A 37-year-old Negro male nursery worker was in his usual state of health until December, 1964. At that time he noted progressive pain and swelling in the right knee, and several weeks later both knees became involved, to the point where he was unable to continue work. Over the next three months swelling developed in the flexor surface of the right wrist and dorsum of the left wrist. Because of these symptoms, he was seen in the Pinellas County Welfare Clinic, where a diagnosis of rheumatoid arthritis was made.

From November 1965 until March 1966, he was treated with systemic steroids in the form of 8 mg. of Decadron intramuscularly every week, as well as salicylates. He was lost to follow-up; however, he sought further medical advice and was hospitalized at Mound Park Hospital in October, 1966 for evaluation of what was thought to be rheumatoid arthritis. Laboratory work at that time revealed negative lupus erythematosus (LE) preparations, negative rheumatoid arthritis (RA) latex, an ASO titer of 166 Todd units, and a C-reactive protein positive at two plus. Sickle cell preparation was negative. An orthopedic consultant recommended a synovectomy of the right knee and excision of the Baker's cyst which had developed in the right knee, along with synovectomy of both wrists; however, the attending physician believed that the patient's low-grade temperature was a manifestation of active rheumatoid arthritis and precluded joint surgery. He was re-evaluated in November, 1966 with similar laboratory findings and a similar conclusion being reached. He was placed on salicylates but was lost once again to medical follow-up. In the summer of 1967, progressive severe synovitis of the right knee developed and for the first time ulcerative skin lesions, which covered the face and the extensor surfaces of both arms.

In August 1967, his knees were aspirated and intra-articular steroids injected in the right knee. In October 1967, he had intra-articular injection of steroids in both knees and on his return in December 1967, it was quite apparent that there had been no response; indeed, the synovitis of the right knee was worsening. It was believed then, in view of the cutaneous lesions, negative RA latex, and severe synovitis of the knees, that he should be admitted for further evaluation and synovectomy, if indicated.

Examination revealed a well-developed, well-nourished Negro male, who had chronic ulcerative skin lesions around the malar surface of the face as well as the extensor surface of both arms. Examination of the extremities showed quadriceps wasting in both thighs. There was severe synovitis with definite effusion of the right knee. The left knee had a thickened synovium but no effusion. The previously described ganglions on the dorsum of the left wrist and the flexor surface of the right wrist were noted.

A tentative diagnosis of rheumatoid arthritis was made and extensive studies were done to rule out other rheumatic problems. X-rays of the sacroiliac joints were within normal limits. X-ray of the chest was negative. X-ray examination of hoth knees showed considerable loss of the joint space with periarticular punched-out areas. There was soft-tissue swelling of hoth knee joints and irregularity of the medial plateau of the right tibia. RA latex fixation, febrile agglutinations, Coomb's test and LE preps were negative. Serum protein electrophoresis revealed marked hypergammaglobulinemia with a total serum protein of 7.8 Gm.%, of which 30% was gammaglobulin. Hemoglobin was 11.2 Gm.; white hlood cell count 7,000, with a normal differential. BUN and urinalysis were within normal limits.

Shortly after admission a biopsy of a skin lesion revealed hyperkeratosis, acanthosis and elongation of the rete ridges by pseudoepitheliomatous hyperplasia in focal areas. The superficial dermis showed considerable necrosis with formation of microabscesses and infiltration by multinucleated giant cells, small round cells, macrophages and large numbers of acute inflammatory cells. Many of the giant cells contained irregular large vacuoles. Special stains for acid-fast bacilli and fungi did not reveal a specific agent and there was no evidence of malignancy. The differential diagnosis of this lesion included granulomatous inflammations, such as tuherculosis, mycotic infection, and sarcoid.

On several occasions the right knee was aspirated, and each time the fluid was progressively more turbid. A synovial hiopsy was performed with a Parker-Pearson needle, and it showed chronic inflammatory cells without distinctive granuloma formation. Special stains with the

Grocott method for fungi showed several irregular small bodies with apparent budding. It was believed that these represented a fungus; however, they were somewhat atypical and failed to show the usual reaction evoked by a fungus. An exploration of the right knee was performed Feb. 9, 1968. Severe necrosis of the synovium was noted without any definite pannus formation. Because of destruction of the right tibial plateau, a knee fusion was performed. Several days later cultures of the skin, as well as the knee joint, grew out a fungus which was later identified as Sporotrichum schenckii by the Florida State Board of Health laboratory. The specimen at time of surgery showed a granulomatous reaction with destruction of bone and joint tissue, microscopic evidence of giant cell reaction, granulation tissue and dense fibrosis. In a few areas of necrotic tissue, as well as within the giant cells, there were yeast-like fungi. No true hyphae were identified. By this time it was quite apparent that the condition was a generalized mycotic infection. The patient's normal blood cell count and lack of lymphadenopathy and normal blood sugars made the likelihood of predisposing diabetes or lymphoma unlikely. Before therapy with amphotericin-B was begun, the cystic lesion on the right wrist was aspirated, and this later grew out a fungus which was also identified as Sporotrichum.

The course of amphotericin-B begun in the hospital was continued and the patient received a total dosage of 390 mg. with maximum doses of 50 mg. per day. This was discontinued after a period of several weeks because the blood urea nitrogen, which was previously normal, rose to 42 mg.%.

In April 1968, he was re-admitted because of swelling in the left knee. There was no synovitis of the fused right knee. The skin lesions had healed and the wrist swelling had resolved. Culture of the left knee joint grew Sporotrichum schenckii and amphotericin-B was given again but had to be discontinued because of rising BUN after 450 mg.

In August 1968, swelling of the left knee persisted and 10 mg. of amphotericin-B was instilled directly into the joint and this resulted in a marked post-injection synovitis, probably chemically induced. Creatinine clearance was normal and a third course of 325 mg. of amphotericin-B was given. It was discontinued when BUN rose to 26 mg.% and hematocrit dropped to 29%. The outcome of the last course of therapy is unknown at this time.

Comment

That sporotrichosis can involve extracutaneous tissues is well documented;[2] however, this disease is not commonly thought of as primarily involving the joints. Toone and Kelly,[3] emphasizing the need for recognition of mycotic infections in bones and joints, reported 25 cases of fungal diseases of bones and joints—with no cases of sporotrichosis included.

The difficulty in obtaining an adequate cure in this patient was probably due to the advanced stage of the disease caused by delay in diagnosis. Difficulty in obtaining satisfactory therapeutic responses parallels the results described by others.[2,4,5] These reports clearly indicate that iodides are ineffective when the disease involves extracutaneous tissues. Lynch, et al,[5] described a case which, like the one reported here, presented with bilateral synovitis of the knees. These and other clinical reports of articular sporotrichosis have emphasized the predilection of the agent for the knee.[2,4-7] Interestingly, a recent report alludes to the confusion that may exist in differentiating sporotrichosis from other rheumatic diseases.[8]

Sporotrichosis, though certainly not common, is far from unknown in Florida. In 1960, Crevasse and Ellner[9] reported an outbreak of eight cases in two separate pine tree nurseries in northern Florida. All patients were nurserymen and the source was traced to a common shipment of moss from Wisconsin.

Schoket, et al,[10] reported four cases from southern Florida, all patients also being nurserymen or gardeners. They stressed the efficacy of early diagnosis just as this paper describes the problems of late recognition.

Summary

A case of articular sporotrichosis presenting with bilateral knee and wrist involvement which caused confusion with rheumatoid arthritis is described. Other case reports, as well as the one herein presented, demonstrate the predilection of sporotrichosis for the knee joints as well as the difficulty in obtaining a satisfactory therapeutic response in advanced cases.

References

1. Schenck, B. R.: On Refractory Subcutaneous Abscesses Caused by a Fungus Possibly Related to the Sporotricha, Bull. Johns Hopkins Hosp., 9:286, 1898.
2. Wilson, D. E.; Mann, J. J.; Bennett, J. E., and Utz, J. P.: Clinical Features of Extracutaneous Sporotrichosis, Medicine 46:265, 1967.
3. Toone, E. C. and Kelly, J.: Joint and Bone Disease Due to Mycotic Infection, Am. J. Med. Sci. 231:263, 1956.
4. Riggs, S.; Moore, A. J., and Gyorkey, F.: Articular Sporotrichosis, Arch. Int. Med. 118:584, 1966.
5. Lynch, A. C.; Geraci, J. E.; Young, H. H.; Weed, L. A., and Bahn, R. C.: Systemic Sporotrichosis with Bilateral Synovitis in the Knees: Report of a Case. Proc. Staff Meet. Mayo Clinic 38:358, 1963.
6. Mikkelsen, W. M.; Brandt, R. L., and Harrell, E. R.: Sporotrichosis: A Report of 12 Cases, Including Two with Skeleton Involvement, Ann. Int. Med. 47:435, 1957.
7. Wehster, F. S. and Willander, D.: Chronic Sporotrichoral Synovitis of the Knee, J. Bone Joint Surg. 39A:207, 1957.
8. Hagemann, P. O.: Sporotrichosis Tendonitis and Tenosynovitis, Arth. Rheum. 11:484, 1968.
9. Crevasse, L. and Ellner, P. D.: An Outbreak of Sporotrichosis in Florida, J.A.M.A. 173:113, 1960.
10. Shocket, E.; Drosd, R. E.; Calderin, V. L., and Segal, G. A.: Sporotrichosis—Easily Diagnosed, Easily Cured, J. Florida M. A. 52:636-639 (Sept.) 1965.

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The Course of Systemic Lupus Erythematosus in a Subtropical Medical Center

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Systemic lupus erythematosus is a collagen vascular disorder of unknown etiology afflicting multiple organs and those tissues which particularly incorporate serous membrane. The illness, more than any other rheumatic disease, singles out young women as victims and prompt, careful management of severe acute attacks may be lifesaving. A clinical impression gained in our arthritis clinic that the frequency and severity of occurrences of SLE were less than encountered in medical centers of comparable size in cities of the northern United States led to the current investigation.[1] Thereupon, a retrospective clinical survey was made of charts of all patients seen during a recent four-year period at our clinic to ascertain whether there were qualitative or quantitative differences in the nature of SLE revealed locally. Major apparent differences in disease characteristics, if found, would provide a basis for studies employing sophisticated epidemiological techniques concerning factors that might be involved—such as levels of air pollution, high solar ultraviolet light penetration, differences in age factors, genetic characteristics of families in residence, and nutritional factors.

As will be shown in this brief report, clinical characteristics of SLE observed, with a few exceptions, appeared to match behavior of this disease as recorded in northern medical centers.

Methods

All patients who came under the care of the arthritis division during a four-year period and fulfilled the criteria arbitrarily set up for this study were admitted for a complete internal medical work-up, including chest x-rays, joint x-rays and electrocardiograms. Patients with milder SLE-like syndromes attributed to anti-tuberculosis therapy, procaine amide, or hydralazine were excluded from the study. Where synovial fluid could be aspirated analyses were made. Serological studies included Westergren sedimentation rate, rheumatoid factor by an acid englobulin latex method,[2] as well as lupus erythematosus (LE) preparations by a clot-sieve method[3] and bead techniques.[4] Analysis of some frozen serums for antinuclear factor by the fluorescent antibody rat liver-slice technique[5] was performed (Fig. 1). Immunoelectrophoretic analyses were made of several serums.[6]

During the four-year period, acute attacks of SLE were managed in the hospital by administration of drugs according to detailed techniques described elsewhere.[7,8] In general, we administered high doses of salicylates to which was added Prednisone in stepwise increasing dosage until vital signs were controlled. Severely ill patients were managed on high dosages of Prednisone alone. In those patients manifesting epileptic-form attacks, phenobarbital and Dilantin were employed, additionally, in a prophylactic manner as well as



Fig. 1. — Fluorescent antinuclear antibody reaction showing a positive reaction. This strong peripheral staining of the rat liver cells (400X magnification) raised the suspicion of acute SLE. Physical findings were not helpful and LE prep became positive two months after treatment had been instituted based on the provisional diagnosis of SLE in this 19-year-old Negro female. (R.B.)

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for treatment. During subsidence of acute attacks the corticosteroid derivative dosages were reduced and finally omitted during remission in many instances. During remission, patients were followed at three to six months intervals in the outpatient clinic. If subacute SLE activity remained, either Plaquenil, 200 to 400 mg. each day, high dosage salicylates on a long-term basis, or low dosages of corticosteroids, 4-10 mg. of Prednisone per day, were usually employed. Acute attacks of severe renal disease were treated with massive doses of corticosteroids; if treatment was unsuccessful, courses of n-mustard or other antimetabolites were employed.

The current data represent the last accumulative information on each of 72 cases at the close of the four-year period (Tables 1-8). A four-year follow-up on survival after their admission work-up could be obtained on 50 patients.

Results

Sixty-four females and eight males were admitted to the study. Thirty-one were Negro (Table 1). At the time of admission, 54 had positive LE preparations as the basis of their diagnosis, 12 had typical LE rash in addition to the clinical syndrome, six had glomerulitis or "wire-loop" lesions on biopsy, and three of the last six had combinations of skin eruptions or kidney lesions (Table 2). By the end of the four-year period, all but four patients developed positive LE preps. The age at onset was estimated historically for a majority of patients and is therefore subject to considerable error. The estimate was based on the cumulative reported clinical manifestations involving the joints or skin in the majority of patients. The peak age range of estimated onset of disease was 20-40 years (Table 3). This distribution matches closely that reported by Shulman and Harvey.[9,10]

Table 1.—Sex and Race Incidence

Female: Male	64:8
Caucasian: Negro	41:31

Table 2.—Basis for Initial Diagnosis of SLE*

		No. Cases
LE preparations	Positive	54
Dermal eruptions		12
Glomerulitis or "wireloop" lesions on biopsy**		6

* Eventually, all but 4 patients developed positive LE preparations.

** Of these 3 had a combination of rash, renal and skin lesions.

Table 3.—Age at Onset

Age	No. Patients
5- 9	1
10-14	3
15-19	9
20-24	13
25-29	9
30-34	8
35-39	13
40-44	7
45-49	5
50 and above	4

Table 4.—Clinical Manifestations

Manifestations	No. Patients
Fever*	70
Arthralgia	59
Arthritis	45
Dermal lesions	45
Pericarditis	35
Pleuritis	20
Weight loss (> 10 lbs.)	20
Lymphadenopathy	31
Splenomegaly	13
Hepatomegaly	9
Cytoid bodies	7
Subcutaneous nodules	3

*Unexplained at onset or at time of diagnosis in 22.

Table 5.—Skin

Manifestations	No. Patients
Acute	21
Chronic (> 3 Mos.)	24
Sunlight sensitivity	12
Alopecia	12
Sarring	11

Table 6.—Hematologic Finding

	No. Patients
Anemia	51
Leukopenia (< 500 cells/mm^3)	39
RA factor positive	26
Serologic test for syphilis, positive	17
Thrombocytopenia (< 100,000/mm^3) platelets	14

Table 7.—Renal Disease

Manifestations	No. Patients
Slight Proteinuria	21
Proteinuria and casts, etc.	21
Azotemia	9
Lupus glomerulonephritis indicated by biopsy	8
Lupus glomerulonephritis indicated by autopsy	2
Nephrotic syndrome	4

Table 8.—Causes of Death

Cause	No. Patients
Pulmonary embolus	3
Sepsis	2
Gastrointestinal hemorrhage	1
Adrenal insufficiency during surgery and accident while on corticosteroid treatment	2
Cerebral vasculitis	2
Heart damage	2
Renal disease	2
Unknown	5

Seventy patients manifested fever during their acute attacks (Table 4). Fifty-nine complained of arthralgias and of these 45 eventually displayed evidence of arthritis. For the most part, during the acute attacks, this finding was manifested by swelling of the wrists, of proximal interphalangeal and metacarpophalangeal joints, elbows, knees, ankles and toes. There was usually slight or no increased warmth of the skin over the joints; effusions were demonstrable most often in knees and ankles by arthrocentesis. Slight, firm, residual thickening of the wrists and knuckles was sometimes noted, but otherwise the arthritis subsided during remissions.

Dermal lesions were seen in 45 patients (Table 5). An erythematous eruption occurred, of short duration, in 21 patients and was usually located over the malar eminences and bridge of the nose. Involvement of the base of the neck or arms was also occasionally seen. Twenty-four patients revealed chronic skin lesions with induration, hyperkeratosis and ulceration which were usually more severe during the acute stage than in the aforementioned group of patients. Some patients revealed papulovesicular elevations with later development of atrophic patches in the same distribution. Alopecia was also common. Severe flareup of the skin eruption attributed to sun exposure, accompanied in most instances by systemic manifestations such as fever and worsening of joint symptoms of pleurisy, were seen in 12 patients. Pleuritis and pericarditis were found in 35 and 20 patients, respectively. Twenty had unexplained weight loss. On physical examination there was noted lymphadenopathy in 31 patients, splenomegaly in 13, hepatomegaly in nine, cytoid bodies in the retina of seven, and three had a picture of classical rheumatoid arthritis. These latter patients had the usual findings[11] of ulnar drift, palmar erythema, interosseous muscle atrophy, contractures, severe tenosynovitis, synovial pouches, and nodules (Table 4). Only two patients in the series fulfilled criteria for lupoid hepatitis[12] and two had cardiac murmurs and other heart findings suggestive of Libman-Sachs endocarditis.[9]

Anemia was observed in 51 patients, leukopenia in 39 (Table 6). The serological test for rheumatoid factor was positive in 26. Thrombocytopenia was observed in 14 patients and the serological test for syphilis was positive in 17. In some of these patients the only initial manifestation beside fever was one or more of these hematological findings, which led to further study and establishment of the diagnosis of SLE. In respect to the genitourinary system, 21 patients never showed more than a trace-to-slight proteinuria transiently during acute attacks of SLE during the four-year period. In 21 additional patients, however, proteinuria was more pronounced and was accompanied usually by the finding of celluluria and granular or hyaline casts. These findings were attributed to renal damage rather than to febrile episodes (Table 7). Only in four patients did the full-blown nephrotic syndrome appear with clinical evidence of edema, hypercholesterolemia and massive proteinuria. Evidence of nephritis was found in eight patients by biopsy and two additional patients went on to death from severe renal failure. Azotemia was observed in nine patients, indicated by BUN above 25 mg.%. Five patients developed epileptic-form seizures during acute SLE flareups attributable to SLE per se and three had psychotic episodes.



Fig. 2. — Diffuse SLE eruption of neck and chest resulting from overexposure to sunlight at Miami Beach. This 35-year-old Puerto Rican housewife, (L.K.) had suffered repeated acute attacks of SLE for four years. Her skin eruptions responded rapidly to Prednisone therapy, but a fatal outcome eventuated during this acute attack from her renal disease.

Discussion

The prevalence of manifestations of SLE in the kidneys and central nervous system in this series is far less than that reported by Harvey, et al,[10] Dubois,[7] and Larson.[8] Approximately one quarter the frequency of nephrotic syndrome found and half the frequency of convulsive seizures or psychiatric breaks reported by Dubois[7]



Fig. 3. — The same patient as in Figure 1 (R.B.) revealed on a subsequent acute attack of SLE ulcerative lesions of the palate. By this time she had developed evidence of pleuritis and pericarditis.

were found in the current series. Although the mortality rate was apparently the same as that recorded in the Johns Hopkins study[9] during a four-year period, the breakdown on the causes of death (Table 8) are suggestive of certain, differences in population sampled. In this series, there were only two fatalities from renal failure, considered a fatal lupus nephritis. Five deaths were considered related to the iatrogenic effects of high dosage corticosteroids required to control vital signs, and not to the SLE per se. The mode of exitus for these five included disseminated sepsis, hemorrhage from peptic ulcer, and embolization secondary to phlebothrombosis. Three patients had congestive heart failure with arteriosclerotic heart disease and were in the upper age range of our series. Two other patients died with congestive heart failure, and autopsy revealed evidence of myocarditis probably of SLE origin. Accordingly, deaths attributed to lupus per se were less than those recorded for other series, such as those of Dubois[7] and Shulman.[9] Autopsies were not obtained in two and the explanation of death at autopsy was not ascertainable in three.

Except for these aforementioned items, frequency distribution of the manifestations of SLE reviewed or documented in this series is similar in most other respects to the corresponding findings of Dubois,[7] Shulman,[9] and Larson.[8]

The cause of these aberrations in prevalence is not clear. It is doubtful that the findings represent any alteration in the nature of the disease, but rather reflect the sampling of the disease in this subtropical community. As much as our hospital complex, particularly in respect to rheumatic diseases, is responsible for the care of a geriatric population, it is possible that those with more severe disease are screened out for private care in small hospitals elsewhere in south Florida. Fear of sunlight exposure might keep patients with more severe manifestations of SLE in northern climates. Finally, there is the possibility that the course is altered in a favorable direction by some factor in the local environment as yet not ascertainable. Latitude alone is probably an insufficient explanation. The clinical course of this disease

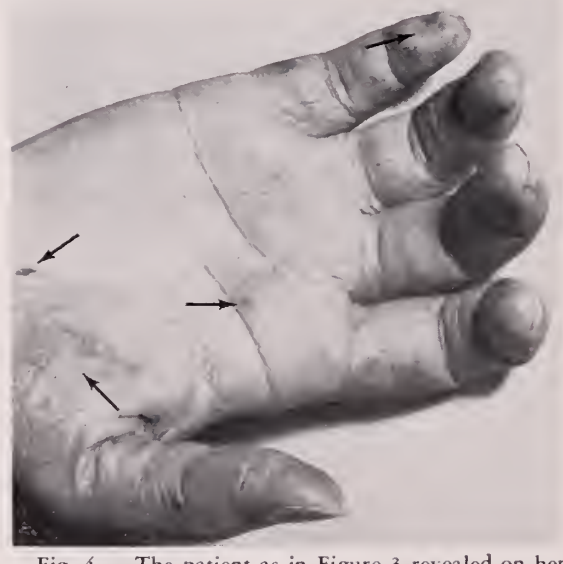


Fig. 4. — The patient as in Figure 3 revealed on her hands numerous purpuric lesions indicative of vasculitis during the same admission.



Fig. 5. — Infiltrative erythematous and hyperpigmented lesions on the outer quadrant of the right breast were demonstrated in R.B. Biopsies of these lesions and histologic examination demonstrated perivascular infiltration compatible with SLE.

as described by DuBois in Los Angeles is a fulminant as described by Shulman in Baltimore. However, the clinical manifestations of rheumatic fever have been documented to be milder in some southern community samples by Saslaw and others. A possible relationship of SLE and rheumatic fever cannot be discarded and, therefore, the current observations appear worthy of presentation although no conclusions can be drawn as to their cause.

Summary

A study was made on 72 patients with histological and clinical evidence of systemic lupus erythematosus, including all known patients with this diagnosis at the Jackson Memorial Hospital admitted during a four-year period. Four-year follow-up studies were completed on 50. Mortality in this group was 17, with an average survival of four and one-half years from the time of diagnosis and eight years from the onset of known illness. A comparison of clinical course of these patients followed in a subtropical climate did not detect any important variation from that described in northern latitudes from European and American medical centers except in relation to renal, neurologic and neuropsychiatric manifestations. Despite evidence of increased exposure to solar radiation, evidence of dermal sensitivity was found in only 12 patients.

References

1. Howell, D. S.: In First Caribbean Congress in Physical Medicine and Rehabilitation, Bull. of Medical Association of Puerto Rico 58:25, 1966.
2. Howell, D. S.; Vaughn, P. O., and Broome, B. L.: Serologic Methods Employing FII Reactant as an Aid to Diagnosis of Rheumatoid Arthritis, Arth. Rheum. 4:368, 1961.
3. Magath, T. B. and Winkle, V.: Technique for Demonstrating LE (Lupus Erythematosus) Cell in Blood, Am. J. Clin. Path. 22:586, 1952.
4. Zinkham, W. H. and Conley, C. L.: Some Factors Influencing the Formation of LE Cells. A Method for Enhancing LE Cell Production, Bull. Johns Hopkins Hosp. 98:102, 1956.
5. Friou, G. J.: Immunofluorescence and Antinuclear Antibodies, Arth. Rheum. 7:161, 1964.
6. Grahar, P. and Burton, P.: L'Analyse Immunoelectrophoretique, Masson, Paris, 1960.
7. Dubois, E. L.: Lupus Erythematosus, New York, McGraw-Hill Book Company, 1966.
8. Larson, D. L.: Systemic Lupus Erythematosus, Boston, Little, Brown and Company, 1961.
9. Shulman, L. E. and Harvey, A. M.: Systemic Lupus Erythematosus, Disease-a-Month Pp. 1-46, 1956.
10. Harvey, A. M.; Shulman, L. E.; Tumulty, A.; Conley, C. L., and Schoenrich, E. H.: Systemic Lupus Erythematosus: Review of the Literature and Clinical Analysis of 138 Cases, Medicine 33:291, 1954.
11. Carpenter, R. R. and Sturgill, B. C.: The Course of Systemic Lupus Erythematosus, J. Chron. Dis. 19:117, 1966.
12. Mackay, I. R. and Wood, I. J.: Lupoid Hepatitis: Comparison of 22 Cases with Other Types of Chronic Liver Disease, Quart. J. Med. 31:485, 1962.

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Evaluation of Drug Responses in the Patient Severely Afflicted with Rheumatoid Arthritis

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A common problem confronting the physician is the accurate estimation of intensity of rheumatoid inflammation at consecutive points in time during which he adjusts the anti-inflammatory drug regimen to the minimal level necessary for the patient's comfort. To provide a reproducible method of handling this problem is not easy. Over the last two decades significant advances have been made by the development of classifications and systems for studying drug responses.[1-3] The ideal method involves purely objective measurements, such as the sedimentation rate, hemoglobin concentration and rheumatoid factor titer for estimate of systemic inflammation. Unfortunately, these are not sufficiently sensitive for evaluating a drug response in severely afflicted rheumatoid patients. The use of jewelers' rings to estimate joint circumference, the dolorimeter, and the tenderness measuring device of Hollander have been found useful for quantitating joint inflammation in early and moderately advanced cases.[2] Because no single measurement seems to have provided an accurate reflection of the anti-inflammatory response to drugs, indices have been developed in which several quantitated factors are pooled in an arbitrary manner.[2,3] One of the leading pioneers in this investigation, Dr. J. Lansbury, has recently summarized and reviewed the progress to date in this field.[2]

An unsolved problem is the rather poor sensitivity of most of these measuring techniques to grade the anti-inflammatory response of patients with far-advanced disease. For example, two methods successful in early or moderately advanced rheumatoid disease are the estimate of joint circumference and the distance between the wrist and shoulder on maximum flexion of wrist and elbow. In the more severely afflicted patient, however, these joints may be so bound down and thickened with non-inflammatory scarring that little change of circumference or maximal flexion of joints occurs despite an effect of a drug on the intra-articular inflammation. Pain due to contractures, weakness from muscle atrophy and neuropsychiatric overtones further befog the patient's response to a given drug level.

The purpose of the current study was to assess the relative sensitivity of certain semi-objective and subjective measures of rheumatoid inflammation in an especially severely afflicted group of patients. Of several parameters of joint inflammation studied in a double-blind trial in this clinic, the stated duration of morning stiffness, pain on motion of a firmly pressed joint, and strength of grip were the most sensitive indices.[4] Also highly subjective measures such as the physician's and patient's overall evaluation were surprisingly sensitive.[4] In a multi-clinic trial of the American Rheumatism Association in which we participated, data on the seven-day variability of several of these parameters indicated their probable usefulness as a testing measure.[1]

Method

Patient Selection.—One hundred ten adult patients with definite rheumatoid arthritis by American Rheumatism Association criteria were carefully screened and only 31 were found to be suitable for this study on the basis of activity of the disease, freedom from other complicating conditions, cooperation and reliability (Table 1). All attended the collagen-vascular clinic at Jackson Memorial Hospital. These were severely afflicted patients, 27 having suffered from the disease for more than five years and 25 being in advanced stages III and IV by American Rheumatism Association criteria.[2] Their average age was 56 years.

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Table 1.—Characteristics of Patients Selected for the Study

Total Number of Patients

31 of 110 Screened

(* = No. Patients)

Sex		Age	Race		Stage	Class	Duration of Disease
*		Yrs. *	*		*	*	*
6	M	Ave 55.7	23	A	6 — II	9 — II	30 > 1 yr.
25	F	31 > 40	8	C	10 — III	16 — III	27 > 5 yrs.
					15 — IV	6 — IV	

Serums of all patients revealed positive rheumatoid arthritis (RA) latex tests, as well as negative lupus erythematosus (LE) preparations. Each patient showed an elevation of sedimentation rate, estimated duration of morning stiffness greater than one-half hour, and in most instances objective signs of bursal or joint effusions, subcutaneous nodules and low grade fever.

Experimental Design.—A modified dose-response design with double-blind control was used (Fig. 1). After meeting the criteria for admission to the study, patients were assigned to experimental and control groups using a table of random numbers. Only the statistician was aware of the assignment. Following an initial baseline observation period of two weeks and two weeks of placebo treatment (period 1, Fig. 1) for both groups, the study group of 19 patients received a stepwise increasing dosage of methylprednisolone of 4, 8, 12 and 16 mg. per day in successive two-week periods.

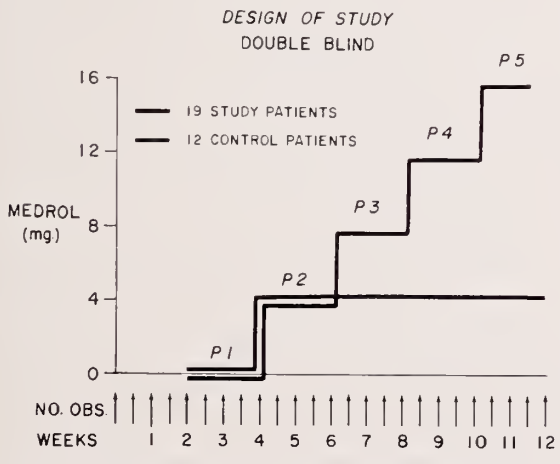


Fig. 1.—Experimental design: Obs.= Number of Observations; P.=—Experimental Period. Inasmuch as all patients were withdrawn to a suboptimal level of cortisone derivatives, the step-up of 4 mgs. Medrol in the control group was a measure of restoration.

Both groups received daily four capsules of identical appearance before meals and at bedtime. Among the total number of patients, 13 were already receiving corticosteroids in moderate amounts prior to the study. In these patients the dosage was reduced gradually over a one-month period to levels inadequate for comfort, prior to onset of Medrol treatment. Administration of 4 mg. of Medrol per day was necessary during periods 2 through 5 for the central group of 12 patients to restore comfort to a level that would prevent dropouts.

Patients were observed twice weekly for three months by the same physician who was unaware of the experimental design. During each visit the seven "measurements" listed in Table 2 were obtained. The patient and the physician were asked to grade the response on the following scale (Figs. 2 and 3): very poor (1+), poor (2+), fair (3+), good (4+), and very good (5+). Pain on motion (Fig. 4) was graded as follows: none (0), slight (1+), moderate (2+), severe (3+) and very severe (4+). Measurements of grip were made with the patient's arm outstretched, recording the height of the mercury in a Baumanometer cuff pinned and inflated to 20 mm. Hg. All changes in response as shown in Figures 2 through 8 were calculated from period 2.

Obtained at the onset and end of the study were: complete blood count, Cutler sedimentation rate, serum latex test for rheumatoid factor, urinalysis, serum potassium and sodium, and arterial pressure.

Statistical Analysis.—Since multiple comparisons are involved and parameters are correlated to some unknown extent, the usual use of statistical significance tests and probabilities of chance occurrence were believed to be inappropriate.* However, it is necessary to consider the variability in response of patients in both the control and treated groups when comparing the parameters of response and evaluating their relative sensitivity. Because the responses are not normally distributed, medians and ranks were used to describe the findings, rather than means. An "index of difference" was calculated for each comparison of the treatment groups by dividing the difference between the observed and expected rank totals by the standard deviation of rank totals. This is one step in the Wilcoxon-White Two Sample Rank Test[5] and enables us to arrange the parameters in order of sensitivity.

*Donald Mainland, personal communication.

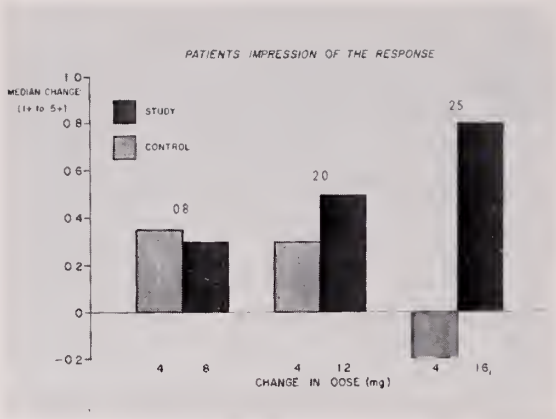


Fig. 2.—Physician's comprehensive evaluation. On this and all subsequent graphs the median change in values of the parameter measured from period 2 is plotted on the ordinate.

The control group (light bars) and experimental (dark bars) register an increasing discrepancy which correlates with difference in dosage. The number over each pair of bars is the "index of difference."

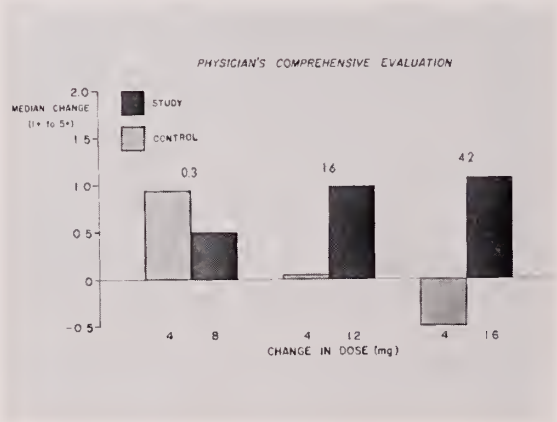


Figure 3

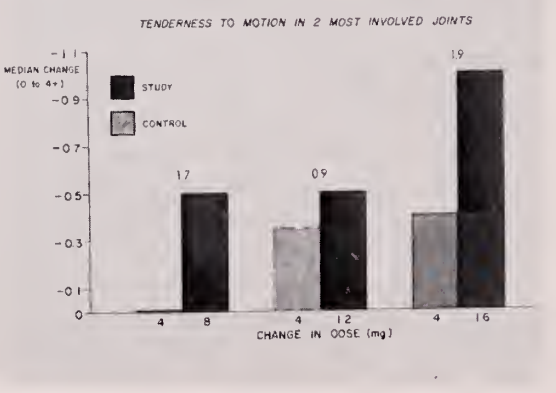


Figure 4

Results

It is seen in Table 2 and Figure 7 that duration of morning stiffness was the most sensitive parameter for the detection of difference in response between control and treated groups when the latter were receiving 8 mg. or 12 mg. of Medrol. Although the treated group had a median decrease of a half-hour stiffness when the dose was increased from 12 mg. to 16 mg., the variability in response of patients in both groups during the latter period was greater and, consequently, the index of difference was no larger than at 12 mg. It should be noted that although the controls had a median decrease in morning stiffness of approximately 15 minutes from period 1 to period 2, there was essentially no further change throughout the remainder of the study. Apparently there was little placebo or cumulative effect in the case of this parameter. In contrast, a striking placebo effect was noted in the case of both the patient's impression of the response and the physician's comprehensive evaluation. As seen in Figures 2 and 3, the observed median improvement of the control group was somewhat greater than the treated group from period 2 to 3, although the latter group was increased from 4 mg. to 8 mg., whereas the controls were held at a constant 4 mg. The optimism of the controls decreased somewhat during the following two weeks while the physician's evaluation of the controls dropped markedly and by period 5, when the treated group was receiving 16 mg., the placebo effect on the controls had vanished and, in fact, the median response was worse than during period 2. Of course, this is reflected in the indices of difference which were very small for period 3 (4 mg. vs. 8 mg.) and very large for period 5 (4 mg. vs. 16 mg.). These two parameters were most sensitive in distinguishing between the groups only after a lapse of six weeks when the placebo effect had disappeared and when the treated group was receiving large doses of Medrol.

Figure 5 shows that there was a median decrease of three joints tender in the study group when the dose was increased to 8 mg. and a median decrease of six and seven joints when the group received 12 mg. and 16 mg. However, the indices of difference between study and control groups were not as large as for the previously mentioned parameters. Strength of grip (Fig. 6) was not a sensitive parameter in this short-term study partly because of the wide variability in response of patients treated alike. This is reflect-

ed in the relatively small indices of difference. In fact, during period 3, the treated group showed a median decrease in grip strength, although the dose had been increased from 4 mg. to 8 mg.

The other two parameters evaluated in this study, tenderness on motion in two most severely involved joints (Fig. 4) and distance between the first metacarpophalangeal and acromioclavicular joints (Fig. 8), also showed relatively small indices of difference, largely because of marked variation and inconsistency of response. The latter two parameters were influenced by deformities of the hand and arm, wrists and elbows and required careful attention to insure uniformity in position during measurement. With regard to tenderness to motion, the rather large index of difference for the 4 mg. vs. 8 mg. comparison did not continue for the following two weeks.

Discussion

The current experimental design is an application to human studies of the dose-response model of inflammation such as used in the pharmacological assay of corticosteroids in animals.[6] Several corticosteroid derivatives do, in fact, give a dose-governed reduction of cotton pledget granuloma weight or intensity of carageenin induced inflammation, a response which has been well documented.[6] In our discussion of the current results, it is assumed that the intensity of actual rheumatoid inflammation also recedes in a dose-governed manner to Medrol. We also assume that in a certain qualitative and quantitative manner, this recession registers an effect on the patient's symptoms and signs. By these assumptions, a method of assessment which correlated well with the increased dose was considered sensitive, whereas a method which registered poorly the stepwise dosage increase of Medrol was considered insensitive.

These assumptions are, of necessity, only partially valid. Restrictions of research procedure on living patients and shortage of suitable patients did not permit drug withdrawal between changes of dosage level or use of different individuals for each dosage level. Withdrawal designs would have provoked a severe, painful rebound phenomenon. Also, we did not consider it safe to prolong the experimental periods beyond two weeks. Therefore, the increased dosage of Medrol employed in the second and third periods of the experimental group undoubtedly influenced responses in the subsequent periods. In this type of study variability of data is increased by prob-

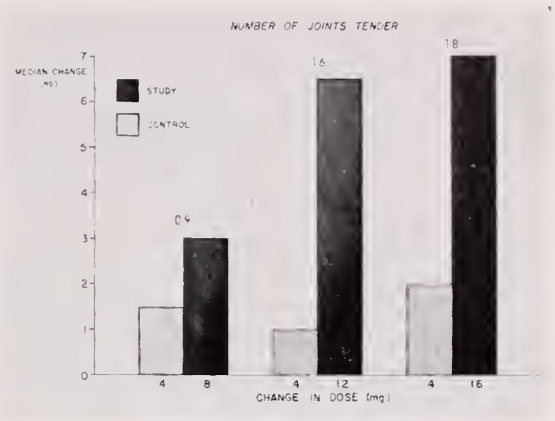


Figure 5

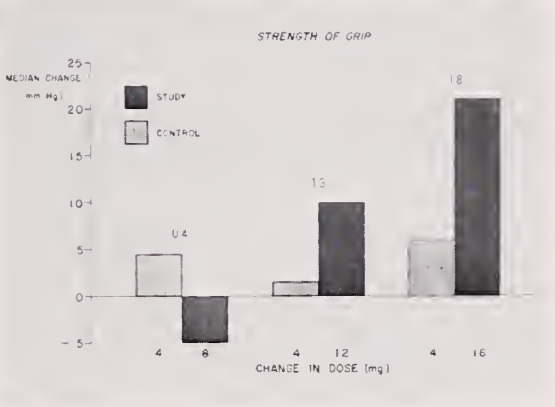


Figure 6

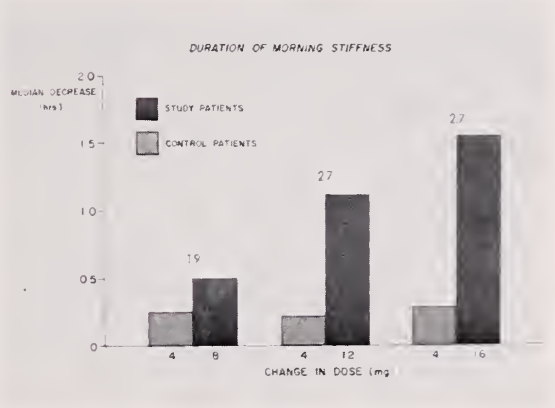


Figure 7

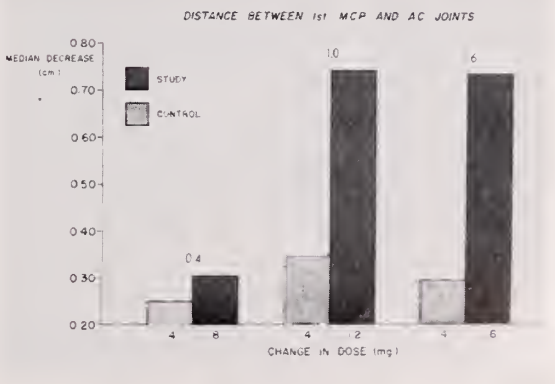


Figure 8

able differences between individuals in respect to the rate of steroid hydroxylation in the liver, local inactivation of the steroid by synovial tissues, and differences of perfusion of afflicted joints by the drug administered orally. Failure to take the drug is not usually a problem in these patients; the pain promptly reappears on failure to take the antiphlogistic agent.

Due to the interdependence of the variables tested, exact quantitation of probability in respect to significant differences between responses could not be calculated. However, it was possible to rank the methods of antiphlogistic drug evaluation in order of decreasing sensitivity to distinguish the steady state control from augmented dosage group (Table 2).

Table 2.—Indices of Difference* Between Control Group and Treated Group at Specified Dosage

	Milligrams of Medrol		
	4 vs. 8	4 vs. 12	4 vs. 16
Duration of morning stiffness	1.9	2.7	2.7
Patient's impression of response	0.8	2.0	2.5
Physician's comprehensive evaluation	0.3	1.6	4.2
Number of joints tender on palpation	0.9	1.6	1.8
Strength of grip	0.4	1.3	1.8
Tenderness to motion in 2 most involved joints	1.7	0.9	1.9
Distance between wrist (first metacarpophalangeal joint) and shoulder (acromioclavicular joint) with maximal flexion of elbow	0.4	1.0	1.6

*Index of Difference = $\frac{\text{observed} - \text{expected rank total}}{\text{standard deviation of rank totals}}$

The semi-objective measure of duration of morning stiffness as recalled by the patient was the most sensitive indicator of change in corticosteroid dosage at low dosage levels, and was not appreciably influenced by placebo reactions.

Strength of grip was a relatively insensitive measure, especially at the lower dosage levels of Medrol (Fig. 6). Haynal, et al,[7] in 1959, in a study of 75 rheumatoid patients, found strength of grip a very useful measure; however, they excluded from the study any patient with a deformity of the hand. Lansbury showed that variation in size of the hand, muscle atrophy, and contractures may be minimized by comparing relative change in strength of grip rather than absolute values.[2] This step was carried out in this study, and the relative (percentage) differences in improvement or decline were too small to show a significant difference in values between study and control group.

The data on tenderness to motion in two most involved joints (Fig. 4) and on distance between the wrist and shoulder (Fig. 8) are suggestive that advanced disease with scarring reduces the sensitivity of this type of measurement discussed by Lansbury.[2]

Although the physician's comprehensive evaluation and patient's impression of response are limited by the vagueness of a 1 + to 5 + intensity scale, they sensitively registered the higher levels of Medrol dosage change. Despite the complexity of subjective responses, the resulting measurements seem to register, for practical purposes, the rough level of antiphlogism in these severely afflicted patients more effectively than most semiobjective measures.

However, there was evidence of large psychological influences among several measurements of the modification of the response. The most important was apparently a placebo response.[8] This response to analgesics and other pain-relieving medicines in a variety of disease situations has been the subject of extensive study in other clinics.[8] It accounts for the necessity of using double-blind trials. Perhaps 30% to 55% of any series of patients with chronic pain syndrome might have an accentuated placebo response.[8]

No attempt was made to disqualify persons who were placebo reactors in this study. Current evidence of the reaction is the improvement in the values for physician's comprehensive evaluation and patient's impression of response during the early periods in the control group (Figs. 2 and 3). During this time it seemed that some patients desired to please the physician by appropriate, favorable response to questioning. By period 5 these placebo effects were submerged. These findings suggest that in such severely afflicted patients, and possibly in others, the placebo response should be anticipated during the early weeks of a new treatment, an observation noted by others in different therapeutic circumstances. In any event, no firm judgment of the effectiveness of a given dose of corticosteroids should be made during a brief hospitalization or single office work-up. Repeated visits over several months are necessary for adjustment of these difficult patients down to a minimal level of corticosteroids or large dosage of aspirin necessary to produce a satisfactory antiphlogistic response.

In office practice, these subjective methods cannot be expected to register a drug response uncolored by placebo reactions and other variables compensated for in this study by the double-blind technique. However, many rheumatologists feel that by knowing the personalities of their individual patients well they can, with experience, intuitively reach a roughly accurate appraisal of drug response.

Summary

Thirty-one patients severely afflicted with definite adult rheumatoid arthritis, by American Rheumatism Association standards, were studied in a short-term double-blind investigation. The effect of a stepwise increasing dosage of the cortisone derivative, methylprednisolone, was assessed using selected "measures" of rheumatoid inflammatory activity.

Duration of morning stiffness was the most sensitive indicator at the lower dosage differentials. It was not appreciably influenced by placebo reactions.

The highly subjective "measures" of patient's impression of response and physician's comprehensive evaluation proved to be more helpful than most of the semi-objective measures after a sufficient period of time had elapsed for the placebo effect to diminish.

References

1. The Cooperative Clinics Trial Committee of the American Rheumatism Association: A Seven-day Variability Study of 499 Patients with Peripheral Rheumatoid Arthritis, Arth. Rheum. 8:302, 1965.
2. Lanshury, J.: Methods for Evaluating Rheumatoid Arthritis. Chap. 18: Arthritis and Allied Conditions, J. L. Hollander, editor, Philadelphia, Lea and Fehiger, 1966.
3. Ritchie, D. M.; Boyle, J. A.; McInnes, J. M.; Jasani, M. K.; Dalakos, T. G.; Grieveson, P., and Buchanan, W. W.: Clinical Studies with an Articular Index for the Assessment of Joint Tenderness in Patients with Rheumatoid Arthritis, Quart. J. Med. 37:393, 1968.
4. Vaughn, P. P.; Howell, D. S., and Kiem, I. M.: The Comparative Effects of Phenylhutazone and G-27202 in Patients with Rheumatoid Arthritis: An Assessment of Methods for Antirheumatic Drug Evaluation, Arth. Rheum. 2:212, 1959.
5. Mainland, D.: Elementary Medical Statistics, Philadelphia, W. B. Saunders Co., 1963.
6. Winter, C. A.; Risley, E. A., and Nuss, G. W.: Anti-inflammatory and Anti-pyretic Activities of Indomethacin, i-(-p-chlorohenzoyl)-5-methoxy-2 methyl indole-3 acetic acid, J. Pharmacol. Exp. Therap. 141:369, 1963.
7. Haynal, J.; Sharp, J., and Popert, A. J.: A Method for Testing Analgesics in Rheumatoid Arthritis Using a Sequential Procedure, Ann. Rheum. Dis. 18:189, 1959.
8. Lasagna, L. and Beecher, H.: A Study of Placeho Response, Am. J. Med. 16:770, 1954.

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Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

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Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

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Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

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British studies reported in April 1968[1,2] estimate there is a seven-to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching.

The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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Florida Medical | editorial

A Floridian Looks at Arthritis

David S. Howell, M.D.

A continuous re-examination and overhauling of medical specialty structures is necessary in order to interpret and to channel properly the volumes of new information in each field. With a rapid population influx, such as Florida's, the soaring patient load demands increased efficiency in delivery of health services.

The arthritis and rheumatism area illustrates this problem well. During the last two decades there has developed a new array of serological tests for collagen diseases, a large number of advances in the use of synovial fluid for diagnosis, improvements in x-ray techniques involving arthrography, and a battery of systemic and local antimetabolites, gold compounds and other chemicals used for the management of various arthritides. Would patient services be improved if rheumatology becomes a separate subspecialty of internal medicine? A physicians' committee of the Arthritis Foundation of America is considering this matter and many are of the opinion that such a move is inevitable.

In what way has the "information explosion" in this field affected responsibility for care of rheumatic patients in Florida? Obviously the number of patients with rheumatic diseases has grown faster than the number of doctors specially trained to treat them. It is estimated that for some 35 to 40 rheumatologists practicing in this state, there are approximately 220,000 arthritic patients. Thus, as in the past, the general internist, the pediatrician and the orthopaedist will continue to handle treatment of most rheumatic patients. Successful management under these conditions depends upon long-term interest and care by the same doctor, or group of doctors, familiar with the patient's individual responses to therapy.

The trained rheumatologist-internist has a special service for his colleagues—to set guidelines of treatment as a consultant. Such an individual is obliged to keep abreast of the most effective programs for patient management with respect to the more than 80 rheumatic diseases. Psychogenic features profoundly influence the course of rheumatoid arthritis, and among factors most disturbing to patients is the severe economic threat that goes with prolonged medical expenses. The numerous problems requiring judgment based on experience have far-reaching consequences because of the long-term nature of these diseases and their complications. For example, only a fraction of crippled rheumatoid patients are best managed with a program of intensive rehabilitation, and, because of the cost of these programs, the patient should be entered only after careful analysis of potential for improvement.

The main focus of interest in at least 40 academic medical centers throughout the United States has been on the immunochemistry of human autoantibodies, biology of inflammatory cells, metabolism of connective tissue macro-molecules and significant leads from analogous animal arthritides. At the University of Miami and the University of Florida at Gainesville and other Florida medical centers, substantial fundamental research related to these diseases is in progress. Such investigations bring closer the day of feasibility of finding a correct explanation of the complex tissue responses and ultimate causes of devastating connective tissue disorders.

The papers in this number of the Journal have applied rather than fundamental research objectives. Reports on the latter type of arthritis research will be submitted for later issues.

Fees

Clyde M. Collins, M.D.

Three faces wears the doctor: When first sought
An angel's; and a God's the cure half wrought
But when, the cure complete, he seeks his fee,
The Devil looks less terrible than he.

Anonymous

What with a state medical society launching a comprehensive study of physicians' fees, the AMA House of Delegates requesting professional fees be stabilized and even lowered, a U.S. Senate subcommittee conducting hearings on physicians' fees, and the late Administration having restrained Medicare monthly premiums at the current low level, in effect freezing M.D.s' fees in that program—then does it not also behoove us to explore the subject? In this era of spiraling health care costs, undoubtedly many doctors' fees have remained unchanged. Many would have been higher except for the cost-reducing factors of increased physician productivity due in part to increased patient visits and increased hours worked, and many fee increases have been justified by improvement in quality of care and by additional newer forms of medical therapy, not to mention the increasing costs of practice. Perhaps we should take a lesson from the auto industry, which consistently justifies, to satisfied customers, the annual increased cost of its product.

At a recent meeting of the judicial board of a local county medical society, letters were read and discussed at length, in which patients took this opportunity to vent their wrath against physicians who "overcharged." One complained of a surgeon charging $25.00 for putting two sutures in a one-half inch laceration; another writer was unhappy because of a $50.00 bill from an orthopedist who had the emergency room nurse apply a sling about the arm of his young son who had an undisplaced fracture of the clavicle. A third letter was critical of a physician who charged $50.00 for two days' hospital care of a young sick child. Logical reasons in letters replying to these were given to the board by each doctor involved as to how he justified his fee. Yet, each patient in turn believed that he had been excessively billed.

A common theme in these and other letters received by the committee was not so much dissatisfaction with services rendered but rather apparent disappointment over not receiving the goods each thought they had come to purchase, coupled with frustration of not knowing exactly what it was they came to buy. Perhaps this is how the profession's image is more often becoming tarnished—not so much from raising fees, but rather from failing to take time to talk (and explain) to the patient.

Realistically a doctor should arrive at a fee by computing such things as the cost of rendering a service and then adding a reasonable profit margin. This would include the sum total of office expenses plus the value of the doctor's time, knowledge and skill. Some system could then be agreed upon so that in arriving at a fair and realistic figure, consideration would be given to some method of adjustment in response to changing times, such as the state of the economy. Such action would be voluntary, based on the prompting of the medical conscience which needs must separate the laws of economics (that of supply and demand) from the ethics of medicine.

Some doctors quote a ridiculously high fee to a patient in hopes he will believe that by paying this much more than the usual fee he will get something that would be many times as good as the same procedure at a cheaper price. A fee higher than usual and customary may be justified, providing the physician quoting the fee has an unusual skill or talent or new scientifically-accepted procedure to give his patient. A favorite line with "fee-gougers," however, is that should the patient want a cheaper operation, there are plenty of doctors who would do it for less, suggesting to the patient that if his operation is worth only so much to him and if he doesn't mind gambling,

then he can go to a cheaper (implying less capable) doctor.

In developing a system of arriving at a fair and realistic fee, consideration should be given to complexities and complications of the services rendered, and circumstances affecting the patient's ability to pay. What the doctor does not see, but the patient does, is the total cost of medical care during any one illness. Each doctor thinks in terms of his own bill which he justifies, but to the patient it is only another to add to that from the internist, or the anesthesiologist and surgeon, the pathologist, the radiologist and the hospital, all too often exaggerated by his loss of income. To the patient these bills are a real and painful experience and he will react accordingly. If the doctor allows himself to be affected by the patient's attitude, his own sense of reality suffers and in the long run he will be less a doctor. He may fall for hard luck stories and charge too little, or he may respond to a patient's masochistic attitude and charge too much. Such emotional and illogical reasons for fee adjustments should be recognized and not allowed to influence one in the raising or lowering of fees, which should be done with deliberate insight.

Realistically, the amount a physician decides to charge for his service is affected by many things: the fundamental principles, inborn and inbred, which motivated his entering the profession; his professional status; his standards of living; his concern for his family and his concern for his patient. The two ends of the scale are love of humanity and love of money; somewhere in between stand all of us.

Over 3,000 years ago, a government-controlled sliding fee schedule for medical care based on the patient's social status was written into the code of Hammurabi and made the law of the land by the king of Babylonia. Hundreds of years later, Guy de Chauliac spelled out clearly the features of a perfect physician: ". . . learned, expert, gracious toward the patient, kindly to his companions . . . not grasping for money but receiving his fee according to his work, his patient's means, the outcome of treatment, and his own ability."

How far has this aspect of the art of the practice of medicine progressed in the ensuing years? □

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Florida Medical | comment

The University of Florida's Lafayette County Health Center

Richard C. Reynolds, M.D.

Most of us who have grown up in medicine during the last two decades are well aware of rapid changes in all fields of medicine. Financial support of research has produced unbelievable results. New antibiotics, oral contraceptives and organ transplants are understandably important. Hospitals are developing intensive care facilities and coronary care units as new and successful ways of treating the acutely and seriously ill. These and many other medical advances are quickly communicated by a sophisticated lay press to an eager public. With this there has been aroused, unfortunately at times, an unfair patient hopefulness for care that the profession has often been unable to deliver. Truly there is a delivery gap between the medical care available and that which is actually received by many individuals.

Historically, this country prides itself on being first in its endeavors. It spends more per capita on health than any other country. Nevertheless, the longevity of the American man has slipped in national rankings from thirteenth in 1959 to twenty-second in 1965. The lifespan of the American woman has fallen from seventh to tenth during the same six years. Our neonatal death rates are too high. In 1965 we ranked eighteenth among countries, with an infant mortality rate of 24.8 (deaths under one year per 1,000 infants born alive), compared to a low among Scandinavian countries of 14.2.

Emphasis on basic medical research, as important as this is, has not yet resulted in the significant improvement hoped for in morbidity and mortality of the citizens of this country. Large areas of this country lack health care, usually because of unavailable or inaccessible medical professionals or facilities. This is true particularly in the centers of our large old cities and in isolated rural locations. Similar to the pockets of economic poverty that exist, we have pockets of health care poverty.

Belatedly, medical schools are beginning to examine the problems of getting health care to the people. Some medical schools in slum areas are entering into surrounding communities to develop programs of medical service and to investigate ways to improve or facilitate delivery of this service. Other schools are trying to define and develop assistants to physicians who will extend the services of overburdened doctors in giving care to more patients. Departments of community health and family medicine are developing in medical schools.

Sociological changes are having their influence on the practice of medicine. A mobile population (one of five families changes residence each year) is increasing the numbers of people in cities and suburbs and decreasing the census of those living in small towns and rural areas. Doctors have followed this migration to the suburbs, but their numbers have decreased proportionately in rural locations and in the centers of large cities. Physician availability is much less in these areas. Public attitudes have changed. People feel that health care is a basic human need. Recent legislation, such as Medicare and Medicaid, proposes

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that the elderly and the poor should not economically be deprived of health care. The problems, then, become those of distribution of medical personnel and facilities, the delivery and quality of care, and the method of payment for health care.

Characteristics of doctors in practice are changing. Less than 20 per cent of medical school graduates go into general practice. Efforts to encourage students to become generalists or family physicians have so far had little success. Many physicians in general practice are seeking training for specialization. Proportionately fewer doctors, therefore, are available to deliver primary care. Practicing physicians are organizing into groups in an effort to utilize better their manpower. Significantly, some of the major advances in streamlining the delivery of medical care have come from physicians outside of the medical schools. The Kaiser-Permanente plan has developed techniques for screening the asymptomatic population, emphasizing the use of new technology and lay personnel.

As physicians we tend to establish health standards that we wish our patients to follow. Among them are an annual physical examination, well baby examinations at specified intervals, cervical cancer screening for women, and a prompt visit to a physician upon the recognition of one of the "seven signs" of cancer. If patients uniformly followed only these few recommendations, we as physicians would be inundated by the demands for our services. As it is, one-third of our citizens have not seen any physician for more than a year. There is urgent need to improve our methods of supplying health care to meet health needs defined by physicians.

Medical students have become a major force in provoking change. They see poverty and inadequate medical care for segments of our population. They question the relevance of their curriculum in medical school to their interpretation of the physician's responsibilities. They want their medical school to care about health care. Their student organizations are planning and carrying out health programs in slums of some cities during the summers.

The College of Medicine at the University of Florida has recognized these changes. Over the last few years it has evolved several community programs in obstetrics, pediatrics and psychiatry. Probably best known are the maternal and infant care programs, which have brought care to a group of medical indigents, expectant mothers and their newborn infants, in a 13-county area in north-central Florida. The Department of Psychiatry has developed community mental health programs to study preventive psychiatry and to try to thwart hospitalization of patients with mental illness. The Department of Pediatrics has staffed a clinic for indigent children in Alachua County supervised by practicing physicians.

To embark on community programs requires participation in the medical care of a community. Medical schools have attempted to do this in different ways. Some have assigned students to local physicians as preceptors. Other students have been assigned to families in their first year of school and followed them throughout the next four years. These programs do expose the student to some of the exigencies of daily family care. They do not serve as a format for a medical school to study health care practices.

What better way to study medical practice than to start, develop and maintain a practice in a community? The medical school at Gainesville is established in a predominantly rural setting. It appeared reasonable to begin teaching and training programs in health care practices in a nearby rural location. North-central Florida is sparsely populated and, compared to other portions of the state, is poor. In Dixie County 5,100 residents are served by one osteopath. Taylor County has six active physicians and a community hospital at Perry for a population of 13,500. Suwannee County, with a small hospital in Live Oak, has four practitioners serving a county population of 17,200. Lafayette County, with a census of 3,000, has been without the services of a physician for 10 years. A visit to a physician by a person living in Mayo, the county seat of Lafayette County, required a round trip of 45 to 60 miles to either Live Oak or Perry. Anthropological studies done over the last four years in Lafayette County by Mrs. Alice Murphree confirmed that many residents did not receive medical care. A clinic for indigent residents was held two half-days a week by the county health officer, who had the total public health responsibilities for Dixie, Suwannee and Lafayette Counties.

The Department of Medicine at the University of Florida had several prerequisites before starting a rural community health program. The area se-

lected had to be in need of health services. Ideally, it should be far enough from Gainesville to have an identity of its own, but not too far for travel to be burdensome. There was need for a clinic building in which to provide care for the citizens. An indication of community acceptance and participation in a university-sponsored health project was deemed necessary.

The numbers of people cared for could not be so great that all the energies of the staff would be used in health services. The teaching and training of medical students, nursing students and resident physicians would have to parallel and compliment the provision of health care. Housing for the professional personnel living in the area had to be found. Interference with existing patterns of nearby physicians' practices should be minimal. The provision of health care would then be community-directed rather than oriented toward a specific socio-economic group. If these objectives were met, the colleges of Medicine and Nursing could then construct a program that was directed at improving the health of a community.

The community health program envisioned was to give training and study health care while actually providing medical care to a community. Medical students would live in a community for several weeks and provide comprehensive care to a circumscribed population under the full-time supervision of a senior resident physician and medical school faculty. Nursing students would stay at the project's location, work in the clinic assisting medical students in patient care, and help to expand the public health nursing programs of the county health department. The faculty of the colleges of Medicine and Nursing would coordinate these students and resident activities and develop teaching and research programs in community health in this setting.

In the fall of 1968, physicians from the Health Center met with residents of Lafayette County to explore the feasibility of the university starting a health care program in their county. The county citizens and their elected leaders were extraordinarily receptive and eager to facilitate this project. They stressed their need for health care. They offered the use of a newly constructed county health building to house the clinic. They established a community advisory committee which participated in the planning and identified for the health professionals their own ideas of health needs. The Lafayette County Commissioners made a $3,000 contribution toward the purchase of an x-ray unit. The citizens themselves insisted upon a fee for medical services that was comparable with nearby prevailing medical fees.

The proposed medical program for Lafayette County was discussed with the physicians in nearby Suwannee and Taylor counties. The physicians in Perry (Taylor County) were helpful in assisting the development of the program and have become active participants. Local practicing physicians are now able to convey to the senior medical students their views on medical care problems.

The Lafayette County Health Center opened on January 6, 1969. By February 28, there had been recorded over 1,400 patient visits—a strong endorsement of this health care project by members of the community. Medical and nursing students have made over 150 home visits during this same time. Local practicing physicians meet with the medical students and convey to them their views and interpretations of medical care problems. The students bring back to the medical center an appreciation of the labors of the practicing physician. Perhaps it is better to let the students tell their own story.

> "As an experience in medical education, the clinic offers several unique opportunities. The patient population is unselected, with the physical and emotional, the benign and the morbid, and the sub-clinical and the end stage of disease thrown together. A knowledge of human behavior and culture is essential in order to function efficiently in such a setting. Skill is required in the practice of meeting the needs of the patient as the patient sees them and in being able to withstand the anxiety, both yours and the patient's, of not being able to call the patient's difficulty by name or arrive at a diagnosis. In day-to-day practice of medicine this particular goal is achieved with clarity in only a small percentage of cases. It was fascinating to observe how the patient's concept of 'good medical care' came to influence my approach to self-limited, generally benign processes."
>
> Gary C. Hankins, MS4 (class of 1969)

> ". . . a unique educational experience which augmented and beautifully complemented the referral nature of Shands Teaching Hospital. In Mayo I was usually the first 'physician' to see the patient. . . Diagnosis at Mayo had to be made without the sophisticated 'knee jerk' laboratory procedures we all use at Shands Teaching Hospital. Physical examination and improvisation suddenly became more important. We had to think twice before getting a simple chest x-ray. Cost of medical care to the patient came to the forefront. . . I was left with certain concepts of health care and the role of the LMD. These concepts could be appreciated in such a short time only in a very small community as Mayo. I became acutely aware of the frustrations of a referring physician trying to utilize Shands Teaching Hospital. In a sense, for the first time I was on the outside looking in."
>
> Walter H. Marshall Jr., MS4 (class of 1969)

During the first eight weeks of the Lafayette County Health Center, seven patients required immediate hospitalization. Three were referred

to Perry, two to the Shands Teaching Hospital at Gainesville, and one each to hospitals in Tallahassee and Madison. Efforts are made to send each patient to the hospital of his choice. The university hospital is used primarily when its resources are needed for the care of the patient.

Since mid-January the Division of Public Health Nursing within the College of Nursing has moved part of its training program in public health to Lafayette County. Senior nursing students are now involved with their nursing instructors in developing and delivering public health care in a program coordinated with State Board of Health activities. This, too, has the hallmarks of being a unique and successful program in teaching public health nursing, partly because of its commitment to a county and specific group of people. Already the student nurses, guided by their instructors and the local county health nurse, have established school health programs. The nurses taught a first aid course to members of the community. Home visits in this rural county have brought a new realism to their public health nursing program.

Lafayette County residents have participated in health clinic activities beyond their role in the community advisory committee. The Mayo Woman's Club has started a beautification of the clinic grounds. On March 1, 1969, the Rotary Club and the Junior Chamber of Commerce staged an Appreciation Day for the health personnel from the University of Florida. The day was highlighted by the presentation of a silver tray to Dr. Robert Batey, the first medical resident at the clinic. It was one of the many ways that the community has said "thank you." On Appreciation Day a free fish dinner was served to the 500 citizens who visited the clinic building and attended the ceremonies.

Although community members are urged to participate in health care projects involving themselves, health professionals seldom become concerned with non-health activities of the community. Members of the university health team living in Mayo have found reward in sharing an experience with the community. Medical and nursing students have enjoyed teaching some science courses in the local schools at the request of the principals. Different members of the health team write a pertinent medical advice column for the weekly newspaper, the *Mayo Free Press*. One of the resident physicians in Mayo walked on the only main street each morning from his home to the clinic. Citizens would greet him; some would stop, chat and discuss many problems outside the usual dimensions of health care. Three students attended a local church one Sunday and the minister acknowledged their presence in church during his sermon and had the students greet the parishioners with him at the end of the service. No yardstick of value can be applied to these and similar experiences, yet our health personnel continue to describe them positively. This interaction of students, housestaff and faculty with the community appears to facilitate the delivery of health care.

We envision this program as a learning experience for the faculty as well as for the students. Faculty members from many departments within the College of Medicine will participate in the health project and, hopefully, they will become aware of the problems of meeting health needs of individuals and communities. Health needs vary considerably, whether they are defined by the people receiving care or the professionals providing the care. This rural health clinic is available to the citizens of Lafayette County 24 hours a day. By analysis of health problems of the patients coming to the clinic, there will be some definition of health services requested by patients. In time, this project will carefully survey either all or a significant sample of the 3,000 county residents to determine what the health needs are from the viewpoint of the medical profession.

As we accumulate these data on health needs, identified by both the community and the medical profession, we then plan to determine the best way to meet these health demands. Included in this planning will be an attempt to define the type of personnel to meet best those needs and the type of training this person might require. Sophisticated data processing techniques will be used with the help of systems engineers, and the applicability of these methods in a sparsely-settled rural community will be studied.

Presently, the health care delivery system of this project uses a senior medical or nursing student as the initial patient contact when someone appears for medical assistance. Already this is recognized as an important teaching-training experience for the student. With careful observation of the patient-professional interface we hope to describe the training of an individual best suited to work at this area of contact.

To meet the needs of people with chronic disability and to recognize the medical needs of those not symptomatic at a given time will require different methods of health care. We intend to compare the traditional methods of physical exams with methods that use a programmed questionnaire, automated laboratory screening procedures, and a lay person to record certain background data and vital signs. Hopefully we can evolve a screening method as adept or better than the traditional methods of history-taking and physical examination which will require little, if any, skilled professional time and still be economical.

A major health problem is communication between professional health people and the community. Another is the failure to understand the attitudes of lay people toward receiving health care. Why do some people seek care and others do not? To unravel some of these puzzles, an anthropologist and sociologist are working closely with us. Perhaps with the techniques of their disciplines we may evolve better methods of communication between the health team and the laymen. Already we are trying to study the impact of this community practice experience on the attitudes of medical and nursing students toward problems of health care delivery.

The role of ancillary health services in providing health services such as home visits and physical therapy will be studied prospectively. A major advantage of this health care project is that it presents 3,000 people in a natural setting as a population in which to study health care in all its ramifications. Fifty million people in this country live in comparable rural settings. The need to study health care practices in these geographical areas is obvious.

The primary ambition of the health care project in Lafayette County will always remain the teaching and training of medical and nursing students and residents in problems of health care delivery and need. In doing this, it will provide medical service to an area previously deprived of readily available medical care. Of equal importance, the project will serve the entire university as an ongoing experience in which to study the problems of getting health care to the people.

▶ Dr. Reynolds, J. Hillis Miller Health Center, University of Florida, Gainesville 32601.

Dr. Sales contributed a scientific article on arthritis for our pages recently. He is most active in giving care to arthritics, but also in developing a social consciousness in Florida for delivery of care and for teaching community participation and self-help for arthritics.—Ed.

Arthritis and the Volunteer

Louis M. Sales, M.D.

In the state of Florida, there are currently three chapters of the Arthritis Foundation functioning, with headquarters in Jacksonville, Sarasota and Miami respectively. In each of these areas there are at least one or more clinics for the indigent and semi-indigent staffed by physicians and lay volunteers, members of the Arthritis Foundation, giving of their time and efforts to aid the arthritic. Physical therapy, occupational therapy and, in some instances, arts and crafts shops (where the arthritic may feel he is at least partially financially independent) are available in each area, as is also an arthritis club where social activities and opportunities to meet others with his problem help to give the arthritic a sense of reassurance that he is not alone and that something is being done for him. Loan facilities are available for self-help devices, wheelchairs, walkers and other devices which are needed, but which the afflicted individual may himself not be able to afford. The chapter offices serve to bring the arthritic up to date on what is and what can be done for his particular problem and to assist him in obtaining help in whatever may be required. In the smaller areas, assistance, at least in the form of physical therapy, mechanical aids, vocational guidance, medical supervision and information which can help the arthritic, is available.

Active research is being carried on in the field of arthritis and collagen diseases in various large research centers throughout the country. In Florida, this is particularly true at the University of Miami School of Medicine under the supervision of Dr. David Howell, whose work in the field of gout has been outstanding. In addition,

clinical research on a smaller scale is also being carried on in Jacksonville and in Tampa and probably by individual physicians in other areas. Medical seminars at which outstanding authorities are brought together before interested groups of physicians to present the most recent information in the field are held at least once a year in various large cities of our state. For the lay public, the various chapters hold open forums from time to time at which the arthritic himself and his family and friends can learn what hope there is for him, how best to treat his disease and how to live with his problem. Finally, various members of the Arthritis Foundation have given of their time on radio forums (sponsored by the local medical society) repeatedly to help educate the public.

For a program of this sort to be successful requires close cooperation between the physician and the lay volunteer. We have learned, as have doctors in other areas of the state, that the lay volunteer is only too willing and eager to give of himself in what he believes is a worthy cause to alleviate the suffering of his fellow man. He needs the guidance and the inspiration of the doctor to whom he turns for supervision and who must channel his energies in worthwhile directions.

▶ Dr. Sales, 1204 LeBaron Avenue, Jacksonville 32207.

OUR COVER ARTIST



Miss Lee Howell is a senior at Everglades School for Girls, Miami. Any artistic relationship with her father is purely coincidental.—Ed.

Our Mail

JFMA International

Re: Reprinting and translation rights for the paper by Pedro Arroyo, Jr. "Electromyography in the Evaluation of Reflex Muscle Spasm, Simplified Method for Direct Evaluation of Muscle-Relaxant Drugs," published in J. Florida Med. Assoc. *53,* 1, 29-31 (1966)

Dear Sirs:

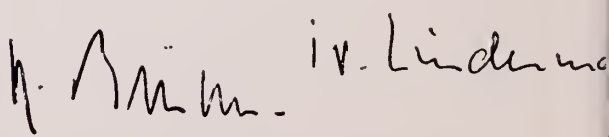
In view of what appears to us the particularly valuable contribution made by the above-mentioned paper, we should very much like to include it in the programme of our new Scientific Information Service, to be sent to doctors all over the world.

We believe the correct form for such information would be as a reprint, identical in form, content and reference with the original publication: for technical reasons, we have had to select a standard format which you can see from the enclosed dummy sample. This is the only way in which it would differ significantly from the original.

Our intention is to send these reprints to a large number of physicians in many countries, mainly those who, for linguistic reasons, may not have read the original publication. Apart from the original language, it will be translated into several foreign languages and this will, we hope, make it accessible to an unusually wide readership.

In order to facilitate coordination and ensure that both translation and technical phases (printing and distribution) are as promptly and smoothly performed as possible, we should like to keep the whole process in our own hands. For allowing us translation and production rights, we should be willing to pay a fee of Sw. Fr. 1,000.—.

As we believe our new programme has positive aspects for you as well, we are sure you will be agreeable to our including the above paper in it, and we await your reply with interest. This will open a new sphere of fruitful cooperation.



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Dear Sirs:

In response to your inquiry, we are pleased to grant translation and reproduction rights to the article by Pedro Arroyo Jr., M.D., entitled "Electromyography in the Evaluation of Reflex Muscle Spasm," which appeared in the January, 1966, issue of the Journal.

Ordinarily, it is our custom to grant such rights without charge. In this case, we would be very happy to accept your kind offer of a fee which we would use to help improve the appearance of our publication.

For your information and possible use, we are enclosing samples of our two most recent covers.

Your interest in the Florida Medical Journal is very much appreciated. If we may assist in any future projects, please let us hear from you at any time.

Eugene L. Nixon
Managing Editor

March Cover

Dear Editor:

We received the March issue of the Journal and read it with interest.

Please tell us where we can get a color reproduction of your *lovely* cover. It captures just the feeling we are looking for in a picture.

Thanks so much, too, for your timely articles.

Judy Walker
(Mrs. George B.)
Pahokee

Perhaps our artist, Claire Drew Thompson, can help out.—Ed.



The Bettman Archive

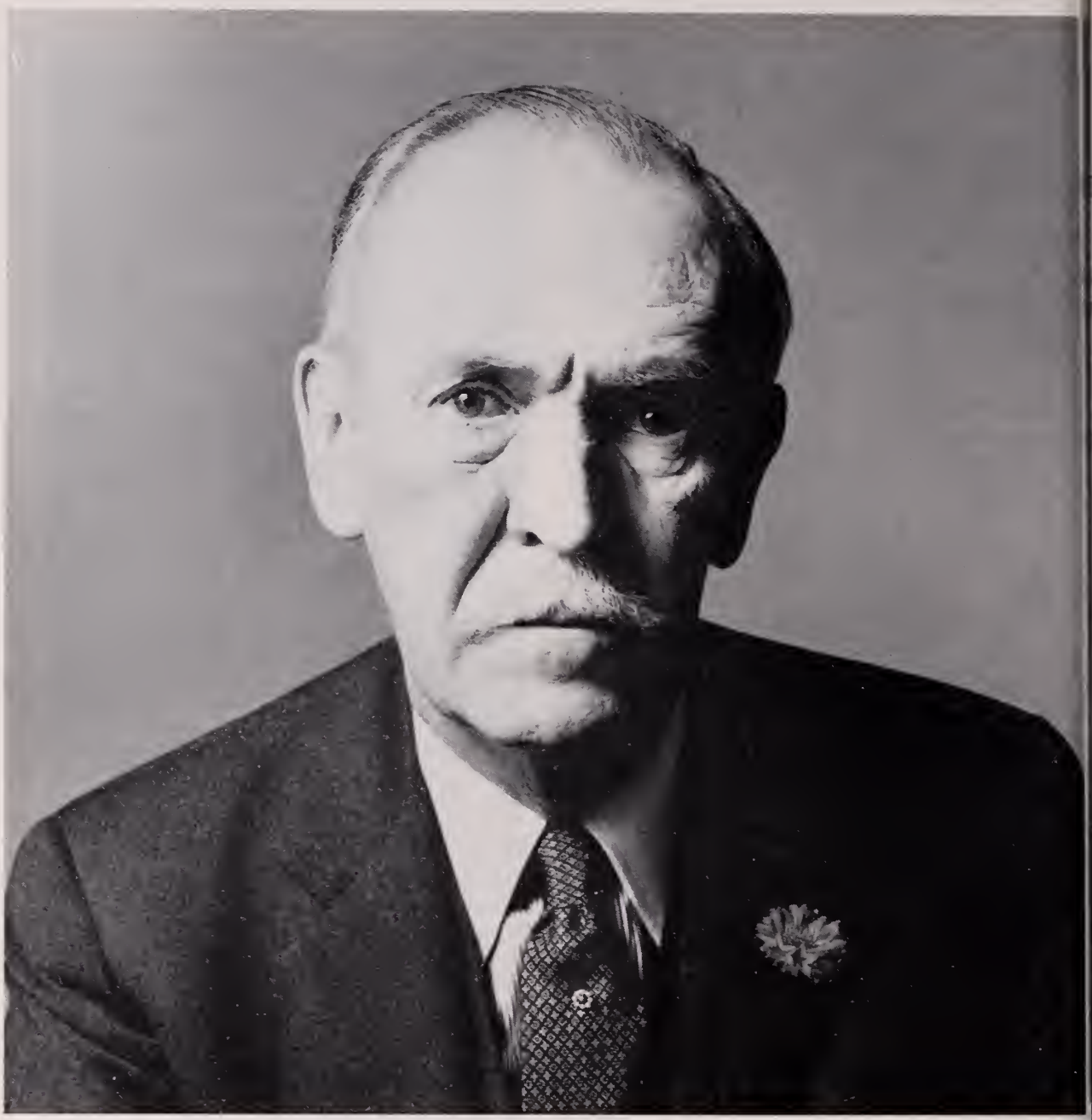
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A Personal Glimpse at Our Outgoing President

Warren W. Quillian, M.D.

Dear Jack:

A good many years ago we read about a river which came out of the ". . . hills of Habersham and through the valleys of Hall. . . ;" of how it ". . . hurried amain to reach the plain, run the rapids and leap the fall." In describing so beautifully the course of the Chattahoochee, the poet (Sidney Lanier) might, by analogy, have had in mind the life history of some friend from Georgia.

Quite awhile later, in Elbert County, a few miles further down state and situated in a portion of Georgia where the hills do not grow so high, you were born. You sojourned awhile in the valleys of Hall and Fulton counties some years afterward. But your subsequent history cannot be compared with the meandering of a river. This I feel qualified to say, having known you, man and boy, in a very close and intimate fashion. From 'way back then, the indomitable purpose and desire of your life was to become a physician. To accomplish this objective required the usual long years of education and training to which all of us in the profession are subjected. But, Jack, you had a real advantage over many of us in your interest, consideration and sincere desire to help other people. Such an attitude, plus your ability, forthright honesty and integrity, have won for you the affection of your patients and friends throughout your years of clinical practice.

The Editor of the Journal personally requested that I put on my retrospectacles and "recount some of the personal history and deeds of this man." Perhaps your greatest accomplishment, thus far, was in persuading Evelyn to become your lovely bride, and to help you through the years to come. The history of the Dade County and Florida medical associations reveals the many different capacities in which you have served, ably and well, organized medicine in this state and nationally. In summary, your career and professional contributions indicate selfless devotion to duty, as you have interpreted it.

The Board of Governors necessarily must study and attempt to find solutions for the urgent problems which confront Florida medicine between meetings of the House of Delegates. In our organizational setup, the President is a member of the Executive Committee of the Board for three consecutive years (before, during and after his baptism of fire). It is during that middle year when he feels the responsibility most.

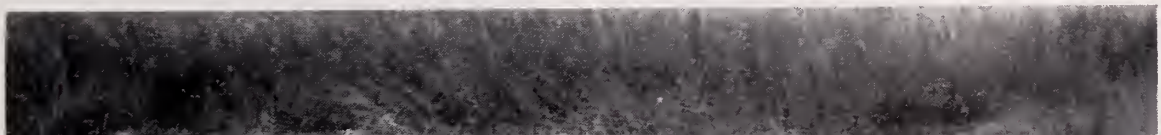
As we review the highlights of your administration during 1968-69, it is evident that the year has been a busy one. The report of the Board of Governors indicates that the affairs and problems of the Florida Medical Association are very complex. We, as members and as citizens, are forever indebted to you and your dedicated, hard-working Board for the time and efforts expended in our behalf. You, as retiring President, to whom we pay tribute and express our thanks, will be there next year to offer the benefit of your experience and judgment, tempered in the crucible of a strenuous year of service.

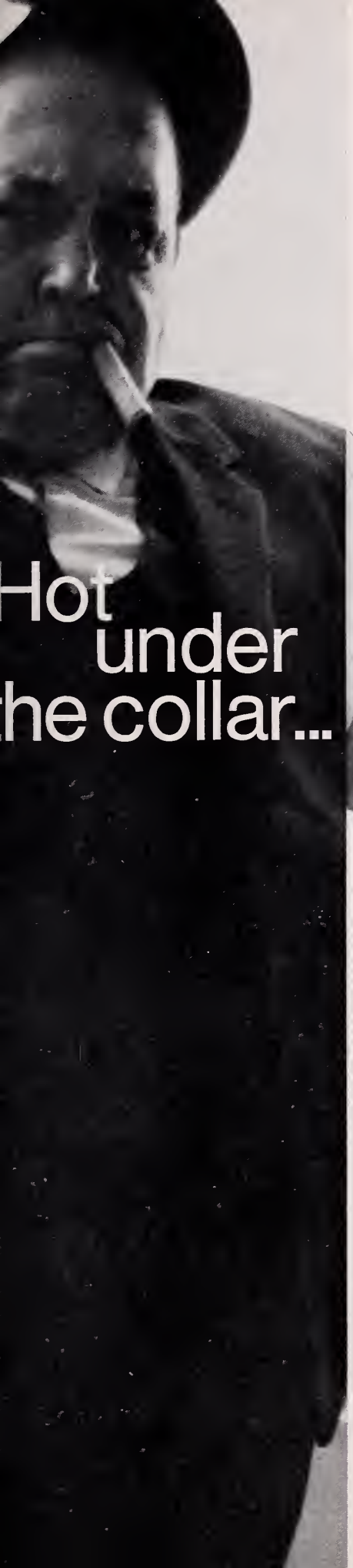
Now, very soon you will be joining the illustrious group of Past Presidents. This is a select club of people who have tried hard, and love to brag about it, at a breakfast once a year thereafter. I'm sure you will be welcomed at this annual meeting of old-timers with a hearty and cordial vote of thanks for a job well done.

Affectionately,
"Uncle Fud"

P. S.

The photograph of you was made at Cumberland Island, situated hard by the marshes of Glynn. It is an interesting coincidence that here in this locale was where another great river (the Altamaha) originating in the same area described in the first paragraph found a resting place.





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Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs.
Use in oregnancy: Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. Increased respiratory secretions, nasal congestion, cyanosis and anorexia may occur in infants born to reserpine-treated mothers.
Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. To avoid hypotension during surgery, discontinue therapy with this agent two weeks prior to elective surgical procedures. In emergency surgery, use, if needed, anticholinergic or adrenergic drugs or other supportive measures as indicated. Because of the possibility of progression of renal damage, periodic kidney function tests are indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated. Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.
Take particular care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Severe salt restriction is not recommended. Use cautiously in patients with ulcerative colitis or gallstones (biliary colic may be precipitated). Bronchial asthma may occur in susceptible patients.
Adverse Reactions: The drug is generally well tolerated. The most frequent side effects are nausea, gastric irritation, vomiting, diarrhea, constipation, muscle cramps, headache, dizziness and acute gout. Other potential side effects include angina pectoris, anxiety, depression, bradycardia and ectopic cardiac rhythms (especially when used with digitalis), drowsiness, dull sensorium, hyperglycemia and glycosuria, hyperuricemia, lassitude, restlessness, transient myopia, impotence or dysuria, orthostatic hypotension which may be potentiated when chlorthalidone is combined with alcohol, barbiturates or narcotics, leukopenia, aplastic anemia, skin rashes, thrombocytopenia, agranulocytosis, nasal stuffiness, increased gastric secretions, nightmare, purpura, urticaria, ecchymosis, weakness, uveitis, optic atrophy and glaucoma, and pruritus. Eruptions and/or flushing of the skin, a reversible paralysis agitans-like syndrome, blurred vision, conjunctival injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible.
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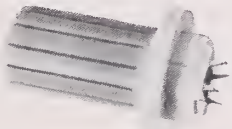
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Contraindications: A history of allergic reactions to penicillins or cephalosporins and infections due to penicillinase-producing organisms.
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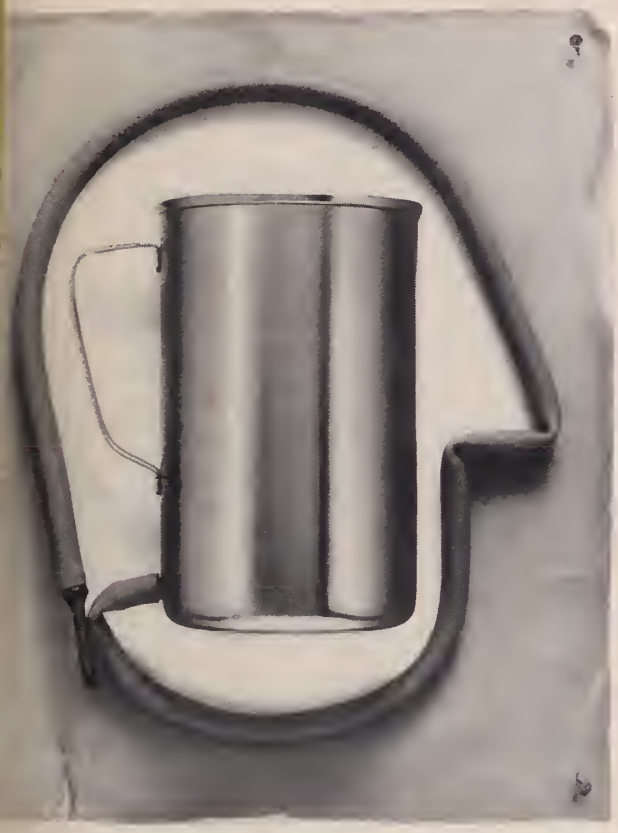
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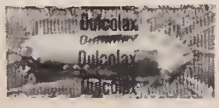
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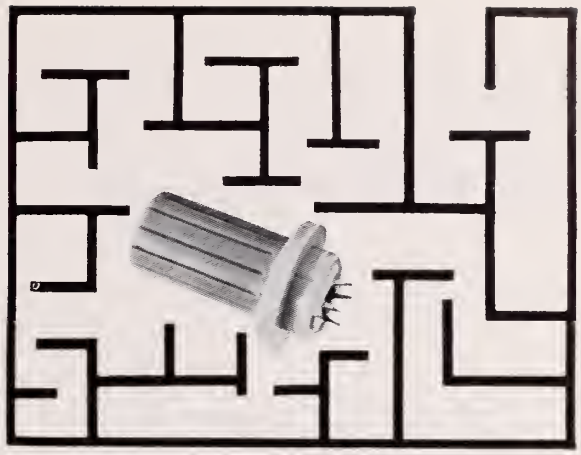
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INTERNIST WANTED: Training in cardiology for partnership affiliation in well-established professional association in Miami Beach. Immediate opening. Write C-865, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: Internist, board certified since 1953, desires associate to share practice in internal medicine in Hollywood, Fla. State qualifications, licensure and service status. Reply to: Melvin M. Stone, M.D., 1755 Adams St., Hollywood, Fla. 33020. Phone (305) 927-2811.

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WANTED: General practitioner, internist, pediatrician for association with mixed group in central Florida. Liberal salary first six months, then salary plus percentage. All expenses paid. Share coverage. Contact Donald F. Jones, M.D., Bond Clinic, Winter Haven, Fla. 33880. Phone (813) 293-1191.

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WANTED: Emergency room physician in hospital; to join group of private physicians, 42 hour week, income $20,000 plus. Contact Bruce S. Webster, M.D., 1416 South Orange Ave., Orlando, Fla. 32806. Pbone 647-5728.

WANTED: House physicians for 24-hour emergency room coverage for 500-bed private, accredited, general hospital in Florida. Salary open. Florida license required. Write C-887, P.O. Box 2411, Jacksonville, Fla. 32203.

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(Continued)

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POSITION WANTED: Desire position as emergency room physician. 31 years old, married, military service completed. Three years general and part-time emergency room practice. Florida license. Seeking position with full-time ER group. Write C-890, P. O. Box 2411, Jacksonville, Fla. 32203.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with knawn hypersensitivity to the drug.

Warnings: Cautian patients abaut possible cambined effects with alcahol and ather CNS depressants. As with all CNS-acting drugs, caution patients against hazardous accupations requiring camplete mental alertness (e.g., aperating machinery, driving). Thaugh physical and psychological dependence have rarely been reported on recommended doses, use caution i administering ta addictian-prane individuals ar thase wha might increase dosage; withdrawal symptams (including convulsions), following discontinuatian of the drug and similar to thase seen with barbiturates, have been reparted. Use af any drug in pregnancy, lactation, or in wamen af childbearing age requires that its patential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitoted, and in children over six, limit tc smallest effective dasage (initially 10 mg ar less per day) to preclude ataxi ar oversedatian, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recammended, i combinatian therapy with other psychotrapics seems indicated, carefully cansider individual phormacalogic effects, particularly in use of patentiati drugs such as MAO inhibitars and phenothiazines. Observe usual precautians in presence af impaired renol or hepatic functian. Paradaxical reactians (e.g., excitement, stimulatian and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Emplc usuol precautions in treatment of onxiety states with evidence af impending depressian; suicidal tendencies may be present and pratective measure necessary. Variable effects on blood coagulation have been reparted very rarely in patients receiving the drug ond oral onticoagulants; causal relationship has not been established clinicolly.

Adverse Reactions: Drawsiness, otaxia ond confusion may occur, especiall in the elderly and debilitated. These are reversible in most instances by praper dasage odjustment, but are also occosionally abserved at the lower dasage ranges. In a few instances syncope has been reported. Also encauntered are isolated instances of skin eruptians, edema, minar menstrual irregularities, nausea and constipation, extrapyramidal symptams, increos and decreased libido—all infrequent and generally contralled with dasage reductian; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytasis), jaundice and hepatic dysfunctian have been reparted occasianally, making periodic blood caunts and liver function tests advisable during protracted theropy.

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THE JOURNAL OF THE

Florida Medical ASSOCIATION

JUNE, 1969 • VOLUME 56 • NUMBER 6

OFFICIAL PUBLICATION OF THE FLORIDA MEDICAL ASSOCIATION, INC.

M D



Design for an ear anti-infective

Designed to act promptly against bacterial pathogens and pain

Otitis media (when the tympanic membrane is perforoted) and otitis externa both respond to the bactericidal action of Furacin® (nitrafurazane) in Furocin-HC (nitrofurazone-hydrocortisone) Otic. Its broad antibocterial spectrum includes most of the organisms encountered in surface infections (but only certain strains af Pseudomonas). The hydrocortisone component in Furacin-HC Otic offords rapid relief af painful swelling.

Designed to let the ear drain freely

The water-soluble base of Furacin-HC Otic permits free droinage and provides a hygroscopic vehicle.

Designed to please and protect the patient

Topical Furacin-HC Otic lets you reserve systemic preparatians for systemic infections. It rarely irritates inflamed epithelial surfaces, and cross resistance or cross sensitization with antibiatics does not occur. In addition, nanmacerating, odorless Furacin-HC Otic saftens wax to facilitate remaval af cerumen.

Also available: Furacin® Otic (nitrafurazane with nifuraxime and diperadon HCl). The wide antibacterial range af Furacin is augmented by the antimycotic activity of Micofur® (nifuroxime). Diperadon hydrachlaride, an efficient local anesthetic, promptly subdues pain and itching. Indicated in bacterial atitis externa, atomycosis ar bacterial atitis media (when the eardrum is perforated).

Precautians: Sensitization ta nitrafurazane may accur with pralanged use and is more likely ta develap in eczematous otitis externo. To minimize such reactions (a) limit applicatian ta a week ar less, and (b) avoid use of excessive amaunts which may run down the face.

This preparation is not indicated far use in treatment af chalesteatama, where surgical intervention is necessary.

Contraindications: The usual cantraindicatians far preparations containing hydrocortisane shou be abserved, such as tuberculaus lesions of skin ar ear, acute herpes simplex, vaccinia and varicella, superficial fungus and yeast infections.

Formula: Furacin®-HC Otic contains 0.2% Furacin, brand af nitrofurazane, and 1.0% hydrocartisane acetate in a water-saluble hygrascopic base af glycerin and palyethylene glycal.

Furacin® Otic contains 0.2% Furacin, brand of nitrafurazone, 0.375% Micofur®, brand of nifuroxime, and 2% diperadan hydrachloride dissalved in water-saluble, nondrying, hygroscapic polyethylene glycol.

™Originators and Developers of The Nitrofurans
EATON LABORATORIES
Division of The Norwich Pharmacal Company
NORWICH, NEW YORK 13815

Furacin®-HC Otic
nitrofurazone/hydrocortisone

Furacin® Otic
nitrofurazone with nifuroxime and diperodon HCl



LACTINEX®

TABLETS & GRANULES

■ **to help restore and stabilize the intestinal flora**

■ **for fever blisters and canker sores of herpetic origin**

Lactinex contains both *Lactobacillus acidophilus* and *L. bulgaricus* in a standardized viable culture, with the naturally occurring metabolic products produced by these organisms.

Lactinex has been shown to be useful in the treatment of gastrointestinal disturbances, and for relieving the painful oral lesions of fever blisters and canker sores of herpetic origin.[1,2,3,4,5,6,7,8]

No untoward side effects have been reported to date.

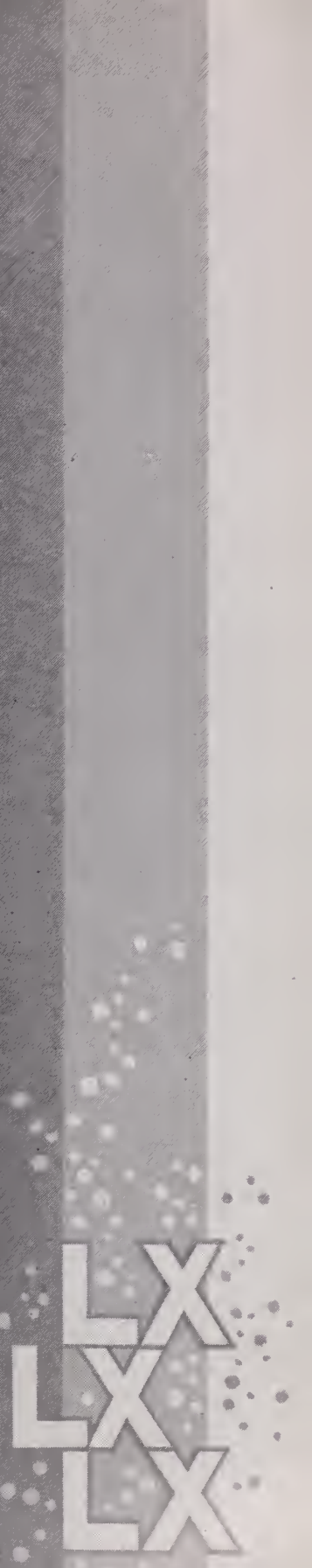
Literature on indications and dosage available on request.

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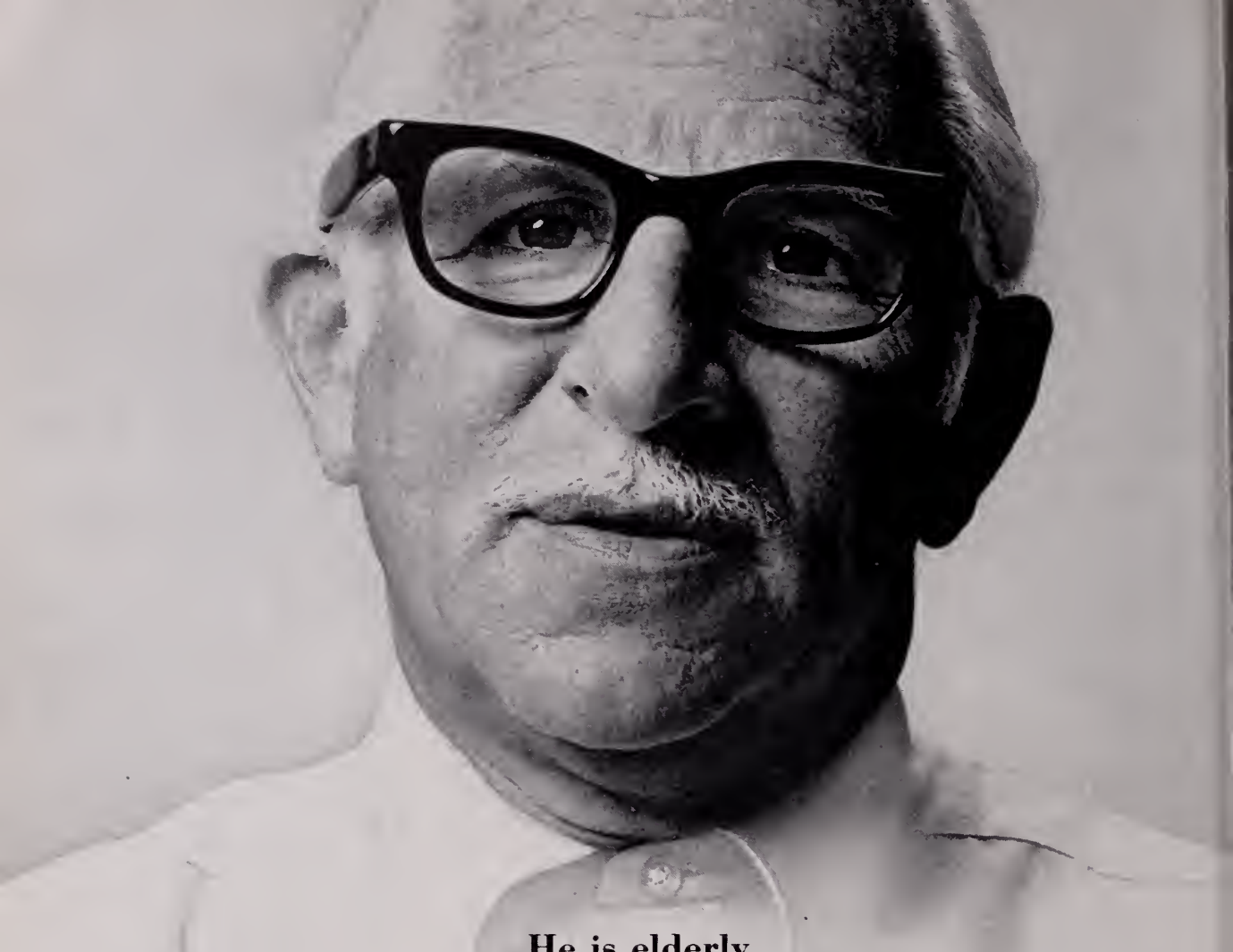
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Baltimore, Maryland 21201

(LX-05)



eferences:
) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., :19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 55. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965.) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, . J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., nes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: ral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.



He is elderly.
He is on corticosteroids.
When he needs an antibiotic
he may be a candidate for

DECLOSTATIN® 300

Demethylchlortetracycline HCl 300 mg
and Nystatin 500,000 units
CAPSULE-SHAPED TABLETS Lederle

b.i.d.

To guard susceptible patients against intestinal monilial overgrowth during broad-spectrum therapy—the protection of nystatin is combined with demethylchlortetracycline in DECLOSTATIN.

For your susceptible candidates, prescribe DECLOSTATIN—the broad-spectrum therapy that prevents monilial overgrowth.

Effectiveness: Because its antibacterial component is DECLOMYCIN Demethylchlortetracycline, DECLOSTATIN should be equally or more effective therapeutically than other tetracyclines in infections caused by tetracycline-sensitive organisms. The antifungal component, Nystatin, protects against superinfection by antibiotic-resistant fungal overgrowth (particularly monilia) in the intestinal tract.

Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. C stant observation is essential. If new infections appear, appropr measures should be taken. In infants, increased intracranial pres with bulging fontanels has been observed. All signs and symptoms h disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, d rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculop ular and erythematous rashes; a rare case of exfoliative dermatitis been reported. Photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Trans increase in urinary output, sometimes accompanied by thirst (ra Hypersensitivity reactions—urticaria, angioneurotic edema, anaphyla Teeth—dental staining (yellow-brown) in children of mothers given drug during the latter half of pregnancy, and in children given the d during the neonatal period, infancy and early childhood. Enamel hy plasia has been seen in a few children. If adverse reaction or idio crasy occurs, discontinue medication and institute appropriate ther Demethylchlortetracycline may form a stable calcium complex in bone-forming tissue with no serious harmful effects reported thus in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should given 1 hour before or 2 hours after meals, since absorption is impai by the concomitant administration of high calcium content drugs, fo and some dairy products. Treatment of streptococcal infections sho continue for 10 days, even though symptoms have subsided.

Leder

LEDERLE LABORATORIES
A Division of American Cyanamid Company, Pearl River, New York

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THE JOURNAL OF THE
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WHAT'S SO WEAK ABOUT THE WEAKER SEX?

OFTEN... HER LOWER G. I. TRACT



Psycho-abdominal Distress: Frequently Female

Women aged 15 to 45 appear to be more prone than men to bloating, cramping pain of stress-related intestinal disturbances such as irritable or spastic colon.[1,2]

Frequently Recurrent

In the experience of many physicians, women are more likely to reappear time after time with repeated complaints of lower G.I. distress.

Requiring Definitive Therapy

Often needed is therapy adequate to control both the somatic and the emotional components of psycho-abdominal complaints.

Definitive Dual Therapy

'Milpath' contains a proven synthetic anticholinergic useful for relieving hypermotility, spasm, and hypersecretion of the gastrointestinal tract.

In addition, 'Milpath' provides a time-tested tranquilizer for mild but effective anti-anxiety action.

With Flexible Dosage

- 'Milpath'-400 (meprobamate 400 mg. + tridihexethyl chloride 25 mg.) Usual adult dose: 1 tablet *t.i.d.* and 2 at bedtime.
- **When less tranquilization is required: 'Milpath'-200 (meprobamate 200 mg. + tridihexethyl chloride 25 mg.)**

Wallace Pharmaceuticals/ Cranbury, N. J. 08512

gently but firmly

MILPATH®

(meprobamate + tridihexethyl chloride)

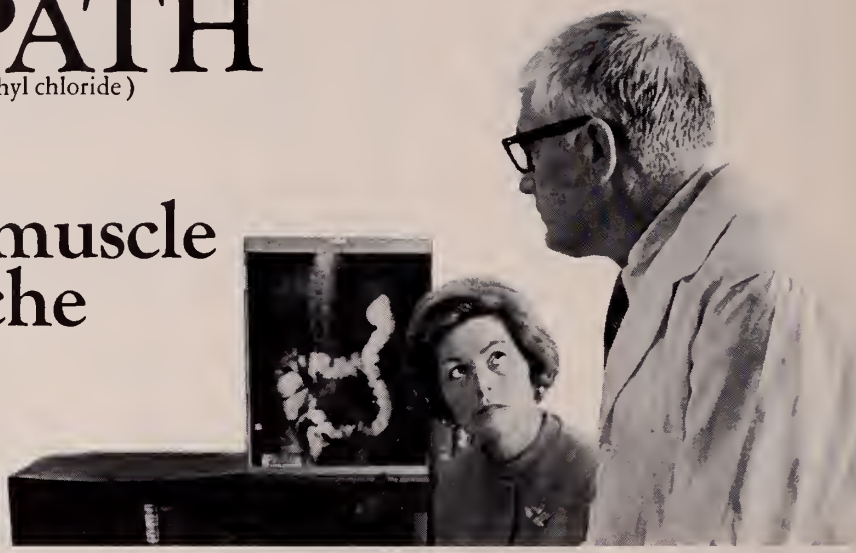
relaxes smooth muscle and psyche

Please see the following page for brief summary of prescribing information.

Gently but firmly MILPATH®

(meprobamate + tridihexethyl chloride)

Relaxes smooth muscle and psyche



Usual Adult Dosage

One 'Milpath'-400 tablet, three times a day at mealtimes, and two at bedtime. For greater anticholinergic effect, two 'Milpath'-200 tablets, three times a day at mealtimes and two at bedtime. Doses of meprobamate above 2400 mg. daily not recommended.

Indications

Useful in organic and functional disorders with hypersecretion and hypermotility of G.I. tract, especially when accompanied by anxiety, neurosis, or tension states. Should be used as an adjunct to all other therapeutic measures.

Contraindications

Tridihexethyl chloride: Urinary bladder-neck obstructions, e.g., prostatic obstruction due to hypertrophy; pyloric obstructions because of reduced motility and tonus: organic cardiospasm (megaesophagus); glaucoma; possibly in stenosing gastric or duodenal ulcers with significant gastric retention.

Meprobamate: Previous allergic or idiosyncratic reactions to meprobamate.

Precautions

Tridihexethyl chloride: Use cautiously in elderly males (possible prostatic hypertrophy).

Meprobamate: Carefully supervise dose and amounts prescribed. Consider possible dependence or habituation (reported occasionally after excessive use), particularly in severe psychoneurotics, alcoholics, ex-addicts. Withdraw gradually (one or two weeks) after excessive dosage for weeks or months to avoid recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching; rarely, epileptiform seizures, more likely in those with CNS damage or latent convulsive disorders). If drowsiness or visual disturbance occurs, reduce dose and advise against activity requiring alertness (driving, machinery operation). Effects of excess alcohol may be increased. Grand mal seizures possible in persons with both petit and grand mal. Prescribe cautiously in small amounts to patients with suicidal tendencies. Prescribe with caution to patients with known sensitivity to compounds of similar chemical structure, e.g., carisoprodol.

Side Effects

The following side effects of components may occur with 'Milpath'.

Tridihexethyl chloride: Severe effects rare on recommended dosage. Anticholinergic effects: dry mouth (fairly frequent at oral doses of 100 mg.), constipation or "bloated" feeling. Possible: tachycardia, dilation of pupils, increased ocular tension, weakness, nausea, vomiting, headache, drowsiness, urinary hesitancy or retention, dizziness.

Meprobamate: Drowsiness, sometimes with ataxia, usually controlled by decreasing dosage, occasionally with aid of central stimulants (e.g., amphetamine). Rarely, allergic or idiosyncratic reactions (usually after one to four doses); in mild form: itchy, urticarial or erythematous, maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever, transient leukopenia, and one fatal bullous dermatitis (after meprobamate and prednisolone) reported. More severe, very rare hypersensitivity: fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (one fatal), anuria, anaphylaxis, stomatitis and proctitis. Treat symptomatically (e.g., epinephrine, antihistamines, possibly hydrocortisone); stop and do not restart the drug. Isolated agranulocytosis, thrombocytopenic purpura, one fatal aplastic anemia reported, but only in presence of known toxic drugs, porphyric symptoms reported but relationship not established. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation reported by one observer. Fixed drug eruption with meprobamate and cross reaction to carisoprodol reported.

Suicidal attempts may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Excessive dosage has led rapidly to sleep, then reduction of vital signs to basal levels. Empty stomach, and if respiration becomes very shallow and slow, cautiously give CNS stimulants (e.g., caffeine, pentylenetetrazol, amphetamine); also pressor amines if indicated.

Supplied

In two strengths:

'Milpath'-400: Yellow, scored tablets.

'Milpath'-200: Yellow, coated tablets.

Before prescribing, consult package circular.

References

1. Harrison, T. R., et al.: Principles of Internal Medicine, Fifth Edition, New York, The Blakiston Division, McGraw-Hill Book Company, 1966, p. 1019. 2. Bockus, H. L.: Gastroenterology, Second Edition, Philadelphia & London, W. B. Saunders Company, 1964, Vol. II, p. 729 et seq.

(1928A01J)

Information for Authors

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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The starfish rightfully has a place on the cover in this "renal" issue. He has no kidney but has used peritoneal dialysis successfully for countless years. The sea water being the same as his body fluids furnishes the perfect dialysis bath.—Ed.

Convalescing . . . but still a long way to go. Anxiety can make it even longer.

Convalescence following medical or surgical procedures may be almost endless to an anxious patient. And, indeed, anxiety with some patients actually retards progress—for example, by inducing insomnia and reducing cooperation.

As physicians have found during nearly 15 years of widespread use, Equanil may be a beneficial part of aftercare. It helps relieve anxiety and tension, thus often aiding your primary therapy.

Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety. anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

EQUANIL®
(meprobamate)

Wyeth®

Wyeth Laboratories Philadelphia, Pa.

Photo professionally posed.





The Coming Year

This is a world teeming with excitement and new ideas. It is also a world in ferment. This ferment is certainly influencing the medical world. Leadership under the circumstances is difficult at most, especially in the medical society. In such a society it is often almost impossible to get concensus or to agree on a practical course of action on controversial subjects.

I think to look back on the lessons of history will help all of us in our medical society problem-solving. Historical events come down to us as facts—but are subject to interpretation. (Did Helen of Troy go with Paris voluntarily or not?) History is measured in thousands of years so that the daily variations are hardly noticed, but *we* live "daily" as did our ancesters and we cannot escape the serious impact of meeting daily problems no matter how trivial they may seem a thousand years from now.

This coming year we have a lot of work to do. There are some troublesome problems; other areas are a lot of fun. The Florida Medical Association has over 200 programs under way. We are blessed with an unusual number of knowledgeable doctors who are interested in our projects.

For the coming year I hope we can study and communicate frequently. Several areas merit our special attention:

1. Our FMA Journal. Here is a means for communication. I hope we can give it even more support. Read it! Write letters—"bug" the editor, Dr. Franz Stewart. It will keep him on his toes.

2. Medical education in all its aspects. Medical schools, graduate medical education, continuing and postgraduate medical education are all important. We all have a big stake in this and must not lose our enthusiasm or influence in developing medical educational programs.

3. The Florida Medical Foundation. This should be beefed up and used in a much greater capacity. Learn all you can about it. Give us ideas.

4. Our councils and committees are important. Please learn the names of your council and committee members, especially in areas of interest to you.

5. Our legislative programs for the state and nation are aimed at the public good. We can use a lot of help and ideas.

Henry J. Babcock Jr.

his ulcer did not heal...until its surface was cleared of dead tissue and debris



FIRST APPLICATION
ELASE Ointment is applied to a deep ulceration of a finger.

EIGHTEEN DAYS LATER
Healing has progressed rapidly without interruption or interference from any accumulated purulence or necrotic tissue. Greatly reduced size of lesion and minimal scar tissue indicate quality and vigor of healing which is almost complete.



to aid in debridement to facilitate healing in chronic cutaneous ulcers...

Elase® Ointment

(fibrinolysin and desoxyribonuclease, combined, [bovine] ointment)

PARKE-DAVIS

By helping to remove dead tissue and debris from the ulcer's surface, ELASE Ointment creates a better environment for the elimination of infection, for healthy granulation...*for healing.* Its lytic enzymes effectively break down DNA in dead leukocytes and other debris...the fibrin in blood clots, serum, and purulent exudates...and the denatured proteins in necrotic tissue. Protein elements of *living* tissue are relatively unaffected. ELASE Ointment is indicated in stasis ulcers and in other infected or inflamed ulcers caused by circulatory disturbances. In cases requiring skin grafting, it is used preoperatively for debridement. For ambulatory patients debridement with ELASE Ointment is a convenient therapy and a regimen likely to be followed. *Precautions:* Observe usual precautions against allergic reactions, particularly in persons with a history of sensitivity to materials of bovine origin or to mercury compounds. *Adverse Reactions:* Side effects attributable to the enzymes have not been a problem at the dose and for the indications recommended. *Discussion:* Successful use of enzymatic debridement depends on several factors: (1) dense, dry eschar, if present, should be removed surgically before enzymatic debridement is attempted; (2) the enzyme must be in constant contact with the substrate; (3) accumulated necrotic debris must be periodically removed; (4) the enzyme must be replenished at least once daily; and (5) secondary closure or skin grafting must be employed as soon as possible after optimal debridement has been attained. It is further essential that wound-dressing techniques be performed carefully under aseptic conditions and that appropriate systemically acting antibiotics be administered concomitantly if, in the opinion of the physician, they are indicated. *Available:* ELASE Ointment is supplied in 30-Gm. tubes containing 30 units (Loomis) of fibrinolysin and 20,000 units of desoxyribonuclease with 0.12 mg. thimerosal (mercury derivative); and in 10-Gm. tubes containing 10 units of fibrinolysin and 6,666 units of desoxyribonuclease with 0.04 mg. thimerosal. ELASE Ointment has a special base of liquid petrolatum and polyethylene; contains sodium chloride and sucrose used during manufacture; is stable at room temperature through the expiration date stated on the package.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

48168

the thousandth teaspoonful

Peptic ulcer patients find the thousandth dose of this antacid as effective and easy-to-take as the first!



Optimal neutralization—provided by the combination of aluminum and magnesium hydroxides.

Unfailing good taste—confirmed by 87.5% of 104 patients in one study, after a total of 20,459 documented days on Mylanta Liquid or tablets.[1]

Concomitant relief of G. I. gas distress—provided by the proven antiflatulent action of simethicone.[2]

Dosage: One or two tablets (well chewed or allowed to dissolve in the mouth); one or two teaspoonfuls to be taken between meals and at bedtime, or as directed by physician.

References 1. Danhof, I. E. Report on file. 2. Hoon, J. R.: Arch. Surg. 93:467 (Sept.) 1966.

Mylanta®

LIQUID/TABLETS

aluminum and magnesium hydroxides *plus* simethicone

Stuart Division/ATLAS CHEMICAL INDUSTRIES, INC./Pasadena, Calif. 9110

When it's more than a bad cold



your patient can feel better while he's getting better

Achrocidin®

Tetracycline HCl—Antihistamine—Analgesic Compound

Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

In tetracycline-sensitive bacterial infection complicating respiratory allergy, ACHROCIDIN brings the treatment together in a single prescription—prompt relief of headache and congestion together with effective control of the organisms frequently responsible for complications leading to prolonged disability in the susceptible patient.

For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

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Bright's Disease Revisited

Guest Editorial

Solomon Papper, M.D. and John R. Richardson Jr., M.D.

We wish to express our appreciation to Dr. Franz Stewart for honoring us with the invitation to serve as guest editors for this issue of the Journal of the Florida Medical Association. We have enjoyed all phases of its preparation: the leisurely lunch with Dr. Stewart when the aims and goals were first considered, the detailed planning, the cooperative spirit and high order of professionalism of the other contributors, and finally, the opportunity afforded us to stand back a step or two and take a moment to reflect more broadly on an important subject. We hope the readers share our sense of pleasure.

Richard Bright (1789-1858) was a most remarkable physician. While others before him knew of uremic symptoms, and although the dropsical state had been described and heat coagulable urine known for a century, and even granular kidneys discussed, it was Bright who understood that this condition with multiorgan expression was due to disease of a single organ—the kidney. Richard Bright not only made meticulous clinical and pathologic observations in his patients with albuminous urine, but he predicted the likelihood of more than one etiology: "It is by no means improbable that we shall hereafter find many other sources of renal irritation to be connected with an analagous state of the urine." The impact of Bright's observations went beyond the great value of the content itself; a basic concept was either introduced or greatly emphasized: "The work would not be complete until every disease which influences the natural structure, or originated in its derangements, has been connected with the accompanying organic lesion." In its period this was a new approach and a new goal.

We have divided our presentation of the subject into two broad categories. In the first section we are concerned with the present status of certain selected aspects—if you will, a new look at "Old Areas." It is clear in Dr. Barenberg's paper that not only have we disposed of the kidney as a "sieve" or "sponge," but in more recent years have recognized that the nephron cannot be depicted as a straight tube, since its anatomy has functional significance, especially with relation to the concentrating mechanism. There is also excitement in appreciating some of the details of the intrarenal circulation and its implications in disease. And the stories of renin and erythropoietin have clearly indicated the importance of substances produced in the kidney and having their effects elsewhere. The story is probably far from complete, since there may well be other endocrine and metabolic functions yet to be found.

The subject of proteinuria is included because the physician faces this problem so often. While

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the importance of quantitation of the proteinuria is emphasized, it is clear that a *properly* performed and interpreted urinalysis remains a most valuable test. A word of caution is expressed: postural proteinuria may not be as benign as previously believed. The article on the glomerulopathies presented by Drs. Perez-Stable and Materson reveals that the electron microscope and immunofluorescent staining have contributed much to our knowledge of glomerular abnormalities. They have not answered all the old questions and, indeed, have generated new unknowns. Since it is clear that glomerular disease is not of single origin, it is well to recognize that the diagnosis of "glomerulonephritis" or "glomerulopathy" often does not define cause; indeed, a biopsy may not always clarify the situation. Dr. Johnson emphasizes that there is still much to be learned about chronic pyelonephritis. Since non-infectious processes may result in anatomic changes identical to those caused by chronic infection, one must question whether everything designated chronic pyelonephritis is, in fact, due to infection. This area has interesting potential for the future. In the article on reversible nephropathies, Dr. Hills gives us insight into the need to search for hypercalcemia, hypokalemia and other reversible lesions in patients with renal disease of unknown cause. And, finally, Dr. Vaamonde reminds us that knowledge of pathophysiology has provided us with considerable rational therapy, short of dialysis and transplantation, in patients with severe renal functional impairment. He urges particular attention to sodium and other dietary factors.

In the second section we wanted to look at some of the "New Areas." Dr. Cade and his associates provide us with helpful suggestions in many areas of prevention of renal disease, including pyelonephritis. They and Dr. Mann emphasize the hazards of our times; it is indeed sobering that many useful agents, such as antibiotics and a variety of chemical substances, may damage the kidney. With technical advances in so many areas of our lives, it seems reasonable to assume that man will develop even more means of causing injury to himself, including his kidneys. These must be studied to be recognized and prevented. Finally, this section closes with a statement of the achievements, problems, hopes and prospects for chronic dialysis, including home dialysis, and transplantation. There are reasons for optimism.

Much has changed in medicine, and our ideas about the kidney have not been excluded from change; the future will surely make our present level of "sophistication" appear naive. With all our progress we are still confronted by patients in whom we can only make the broad diagnosis of "chronic renal disease." In some instances the pathologist, even with the help of electron microscopy, can only add, "end-stage kidney." Then there is room to reflect on the possibility that we are not quite as far removed from "Bright's disease" as one might think.

The guest editors acknowledge with appreciation the editorial assistance of Miss Margaret Allshouse and Mrs. Ruth Parker.

Formation of Urine

Robert L. Barenberg, M.D.

One hundred sixty liters of water are filtered by the kidneys each day. This ultrafiltrate contains substances which are toxic or useless to body economy. On the other hand, this volume also contains more than 1 kg. of sodium chloride, 500 Gm. of sodium bicarbonate, 250 Gm. of glucose, and other ingredients in such quantities that their complete excretion would be rapidly lethal. The kidney is one of the major organs concerned with maintaining the volume and composition of body water. To accomplish this, multiple functions are performed in an integrated fashion. The ability to respond to the needs of body economy is remarkably maintained even in the face of advancing chronic renal disease.

In spite of centuries of speculation, experimental definition of renal physiology has been provided only during the last 50 years. Richards and associates in the 1920's provided experimental proof of glomerular ultrafiltration and tubular reabsorption. Marshall and his colleagues provided evidence of tubular secretion. Today, much confirmatory data have established the formation of urine to be the result of glomerular ultrafiltration, tubular reabsorption and tubular secretion.

Structure of the Nephron

Each human kidney contains over one million discrete structural units, the nephrons (Fig. 1). The nephron begins with a filtering bed, the glomerulus. The glomerulus consists of a capillary bed which has invaginated the blind beginning of a long tubule. The filtrate must pass from the capillary lumen across an endothelial cell, a basement membrane, and an epithelial cell to gain access to Bowman's space and the tubular lumen. The remainder of the nephron is a long tubule which can be considered in terms of its various anatomical sub-units. The proximal convoluted tubule begins at the glomerulus in the cortex, or outer portion of the kidney, and ends in a straight segment, the pars recta which dips into the inner kidney, known as the renal medulla. In the medulla the pars recta becomes the loop of Henle which has a hairpin configuration with descending and ascending limbs. The ascending limb returns to the cortex to become the distal convoluted tubule. The distal tubule turns inward and ends in the collecting ducts of the renal medulla. Thus, the nephron is clearly not a straight tube and must not be so depicted functionally.

Function of the Nephron

Until quite recently the functional implications of the complicated structural configuration of the nephron were ignored. The theoretical considerations of Kuhn relating the concentrating mechanism of the kidney to the unique structure of the nephron have now been widely accepted and are supported by a diversity of experimental data. Fundamental to this, the countercurrent mechanism, are discrete relationships between tubular fluid flow, the loop of Henle, transport of sodium and its concentration in the interstitium, medullary blood flow and collecting duct permeability. Explanations for a variety of pathological conditions involving the concentrating mechanism have now been made possible by examining these variables.

A number of extrarenal factors are important in the regulation of renal function. Antidiuretic hormone increases water reabsorption in the distal nephron. Aldosterone influences the conservation of sodium. A humoral substance, known presently as "third factor," increases the excretion of sodium. Parathormone promotes phosphate excretion and stimulates calcium reabsorption.

A brief physiologic journey along the nephron will demonstrate the production of urine utilizing

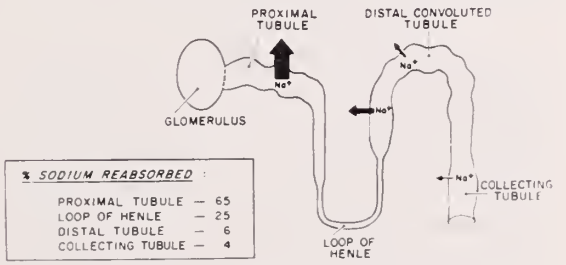


Fig. 1. — A schematic diagram of the nephron demonstrating sites of sodium reabsorption. Plasma is filtered by the glomerulus to become tubular fluid. The tubular fluid passes sequentially through the proximal tubule, loop of Henle, distal tubule and collecting tubule. In this passage the ultrafiltrate of plasma is modified by tubular reabsorption and secretion.
(Reproduced with permission of the publisher from Lauler, D. P.: Hormonal Control of Renal Function, in Renal Failure, Brest, A. N., and Moyer, J. H., Philadelphia, J. B. Lippincott, 1967.)

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the mechanisms of filtration, reabsorption and secretion. Tubular fluid, containing crystalloids in the same concentrations as plasma, is formed by the ultrafiltration of plasma through the glomerulus. The force required to produce this protein-free solution is provided by the arterial blood pressure.

During the transit of glomerular filtrate through the proximal tubule, 65% of the filtered sodium, water and calcium are reabsorbed (Fig. 1). All of the filtered glucose, potassium and uric acid are reabsorbed proximally. The acid-base balance of the body is served by near total proximal reabsorption of bicarbonate. Organic compounds, many foreign to the body, such as penicillin and phenol red (PSP), are secreted into the proximal tubule.

The tubular fluid passes from the proximal tubule into the loop of Henle where an additional 25% of filtered sodium and water may be reabsorbed (Fig. 1). By reabsorbing sodium (but not water) in its ascending limb, the loop serves as the mainstay of the concentrating mechanism of the kidney by creating and maintaining renal medullary hypertonicity.

In the distal tubule, uric acid and potassium are secreted into the tubular fluid. Hydrogen ions are secreted and buffered by already present weak acids. Cells of the distal tubule produce ammonia which markedly enhances the buffering capacity of the urine. Additional calcium reabsorption occurs in the distal tubule.

The final step in concentration of the urine takes place in the collecting duct. Antidiuretic hormone increases the permeability of the duct allowing equilibration of the tubular fluid with the hypertonic medullary interstitium. The final reabsorption of sodium also occurs here.

Renal Blood Flow

Ninety per cent of the blood flow to the kidney normally supplies the cortex which contains the glomeruli and the convoluted portions of both the proximal and distal tubules. Ten per cent of the total renal blood flow enters the medulla in which are found the loops of Henle and the collecting ducts. Diverse disease states are associated with alterations in intrarenal circulation; for example, in congestive heart failure, cirrhosis and acute renal failure there is decreased outer cortical flow and increased medullary flow.

The blood supply of the nephron begins with an afferent arteriole which divides into the glomerular capillary bed. These capillaries unite again to form an efferent arteriole. The efferent arteriole then supplies the tubule through a peritubular capillary system.

Juxtaglomerular Apparatus

Much recent attention has been directed to the juxtaglomerular apparatus with regard to renal regulatory mechanisms. This apparatus consists of cells at the beginning of the distal tubule, the macula densa, which are in close proximity to granular cells found in the afferent arteriole. Renin formation occurs in the granular cells of the afferent arteriole. Because of the unique anatomy of the juxtaglomerular apparatus, a feedback mechanism has been proposed relating the composition of tubular fluid at the macula densa to control of glomerular filtration rate.

Humoral Functions

The kidney also has endocrine-like functions in elaborating erythropoietin and renin. The anemia of renal disease is largely related to diminished erythropoietin production. Renin is involved in blood pressure regulation through angiotensin and aldosterone production. Renin levels are elevated in malignant hypertension and depressed in primary aldosteronism.

Conclusion

By ingeniously combining all of these mechanisms, along with others unmentioned and undiscovered, the kidney conserves essential substances, regulates body pH and excretes waste. Today, much research is focused on the precise mechanisms of renal regulation of sodium conservation and intrarenal hemodynamics in both normal and pathologic states. The answers to these questions will provide specific foci at which to aim treatment in a more rational and physiologic manner.

Bibliography

Berliner, R. W. and Bennett, C. M.: Concentration of Urine in the Mammalian Kidney, Am. J. Med. 42:777-789 (May) 1967.

Epstein, F. H.: Calcium and the Kidney, Am. J. Med. 45:700-714 (Nov.) 1968.

Landwehr, D. M.; Schnermann, J.; Klose, R. M., et al: Effect of Reduction in Filtration Rate on Renal Tubular Sodium and Water Reabsorption, Am. J. Physiol. 215:687-695 (Sept.) 1968.

Malnic, G.; Klose, R. M., and Giebisch, G.: Micropuncture Study of Distal Tubular Potassium and Sodium Transport in Rat Nephron, Am. J. Physiol. 211:529-547 (Sept.) 1966.

Malnic, G.; Klose, R. M., and Giebisch, G.: Microperfusion Study of Distal Tubular Potassium and Sodium Transfer in Rat Kidney, Am. J. Physiol. 211:548-559 (Sept.) 1966.

Pitts, R. F.: Physiology of the Kidney and Body Fluids. Chicago, Year Book Medical Publishers, 1968.

Richards, A. N.: Urine Formation in Amphibian Kidney, Tr. Am. A. Genito. Urin. Surgeons 27:241-247, 1934.

Smith, H. W.: The Kidney: Structure and Function in Health and Disease, New York, Oxford Univ. Press, 1951.

Smith, H. W.: Highlights in History of Renal Physiology, Bull., Georgetown Univ. Med. Center 13:4-48 (Aug.) 1959.

Thurau, K.: Renal Hemodynamics, Am. J. Med. 36:698-719 (May) 1964.

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Proteinuria

Solomon Papper, M.D.

Patient: Doe, John
Urinalysis:
Color —amber
Sp. gr. —qns
pH —6
Sugar —0
Protein —trace
Sediment—Occ. RBC, 0-2 WBC, Occ. hyaline cast

The above may be referred to as the "all-purpose" urinalysis report. Its "merits" are to be found in its scope (it may be associated with a normal urinary tract or one afflicted with a large spectrum of disease) and its possible aesthetic value in a patient's record. For care of the patient it is generally useless, while sometimes giving false comfort and denying the patient the potentially great value of a simple and extraordinarily helpful test.

A proper urinalysis generally reveals renal disease, if present, and in *many* instances leads the physician a long way towards an etiologic diagnosis. While the urinalysis cannot provide a complete assessment of renal function, the specific gravity may serve as a guide before the results of more definitive tests are available. For example, a patient with chronic urinary tract infection and a specific gravity of 1.028 probably has good renal function. Correct interpretation of the specific gravity is predicated on knowledge that it is greatly influenced by diuresis, glycosuria, dextran, contrast materials used in pyelography and is dependent upon an accurate, calibrated hydrometer.

One of the most common abnormalities in the urinalysis is a positive test for protein. We will consider briefly the detection and meaning of proteinuria.

Source of Urinary Protein

There is evidence in animals that some protein is normally present in glomerular filtrate. There is also direct and indirect evidence that filtered protein is reabsorbed by tubular cells. Experiments in dogs, and the fact that in man some urine proteins differ from serum proteins, suggest that protein may be added to urine by renal tubular cells. That a small amount of protein may be added to the urine in the lower urinary tract is suggested by the immunologic similarity of some urine proteins to those in semen and prostatic fluid.

In renal disease associated with marked proteinuria, the major mechanism appears to be increased permeability of the glomerular membrane rather than decreased tubular reabsorption or tubular addition of protein to the urine. The precise nature of the glomerular "leak" is considered in more detail elsewhere in this issue ("The Glomerulopathies" on page 393), but much is unknown and, indeed in many instances, the electron microscope has insufficient resolving power to detect the presumed defect in the basement membrane responsible for its failure as a barrier to protein loss.

In most renal diseases the major protein in the urine is albumin. However, in the plasma cell dyscrasias (e. g., multiple myeloma), even without renal involvement, abnormal globulins may appear in the urine because they are small enough to penetrate the normal glomerulus.

Detection of Proteinuria

The methods commonly available for detection of increased proteinuria have limitations and require care in execution and interpretation.

1. Dipstick methods are dependent upon a change in color produced in the impregnated indicator material in the presence of protein. In our experience a trace or 1+ reaction may or may not indicate significant proteinuria. On the other hand, a negative reaction may or may not exclude small but significant levels of proteinuria. Further, the dipstick methods do not detect Bence-Jones protein.

2. The heat and acetic acid method can detect as little as 5 to 10 mg. of protein per 100 ml. of urine. Despite its apparent simplicity, a few practical points are worth emphasis. Since the urine must be clear at the outset, we test the decanted

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supernatant from the centrifuge tube used to concentrate the sediment. The urine in the *upper* portion of the test tube is then brought to boiling; this has the advantage of allowing for careful comparison with the clear lower portion. Five drops of 5% acetic acid should then be added and the specimen reheated. Several points about acetic acid are essential to proper performance of the test: (a) it *must* be dilute (5%), because glacial acetic acid may actually dissolve some protein precipitates; (b) it should be added to the urine *whether or not* there is a precipitate in the initial boiling, because acetic acid not only dissolves phosphate precipitate, but it may also allow heat precipitation of protein that remains in solution in a less acid pH. On occasion Bence-Jones protein may give a negative test with rapid boiling, but the development of turbidity as the urine cools may provide a clue to the presence of an abnormal protein.

Tolbutamide metabolites, some x-ray contrast materials, and para-aminosalicylic acid may give false positive tests.

3. The use of sulfosalicylic acid to precipitate urinary protein is a test of about equal sensitivity, is less complicated and detects Bence-Jones protein. False positives may occur due to the same causes previously listed.

It is apparent that these tests, although sensitive to relatively small amounts of protein in the urine, are really qualitative. Thus, it is conceivable that clinically significant proteinuria may be overlooked with any of these tests if the urine is dilute. On the other hand, it is possible to have a trace or 1+ reaction with normal amounts of proteinuria if the specimen is sufficiently concentrated. Finally, a 3+ to 4+ reaction might reflect daily excretion of from 1 Gm. to 10 Gm. of protein or even more, depending upon the volume and precise protein concentration in the specimen examined. These differences may be of diagnostic importance and certainly are essential in following the course of illness and effect of therapy as, for example, in the nephrotic syndrome. For these reasons a quantitative approach is essential for proper diagnosis, observation and treatment of patients with proteinuria.

Quantitative Aspects

There are many methods available, some semiquantitative and some truly quantitative. For relatively little more effort the latter is preferable, and a biuret method modified for urine is recommended.[5,6] In order to assure complete 24 hour collection of urine, every patient must be instructed carefully. He should be told to void and discard his urine *precisely* at 7 a.m. (or other convenient hour) and thereafter deposit all urine into a bottle with the last voiding placed into the same bottle at 7 a.m. of the next day (or *exactly* 24 hours later) and bring the entire specimen to the laboratory. In our experience it is common even for the intelligent patient to make mistakes if this careful explanation is not provided. For further assurance of the completeness of collection, the total creatinine content should be determined.* In most adults it is of the order of 800-1,500 mg. Thus, a creatinine excretion of, for example, 350 mg. in the total specimen in an adult who is not emaciated and has stable renal function generally indicates that the collection was not complete. Urinary volume is a much poorer guide to completeness of collection.

In order to know if excess quantities of protein are present in urine, it is obviously essential to know normal values. Generally normal urine contains approximately 40-80 mg. daily with an upper limit of 150 mg. On the other hand, recent data of De Luna and Hulet suggest that normal adults may have higher values.[7] Indeed, in 46 "healthy" subjects aged 20-30, these investigators found a range of about 75-260 mg., with an average of 140 mg. per day. While for the present we continue to regard 150 mg. as the upper limit of normal, these observations in an excellent laboratory suggest that somewhat higher values may be acceptable. De Luna and Hulet have also demonstrated that the values are lower in children. Electrophoretic studies of normal urine vary a bit, but as much as two thirds of the protein may be globulin.

Clinical Significance

Proteinuria, for reasons alluded to, is generally due to renal disease with particular involvement of the glomerulus. In general, "heavy" proteinuria refers to more than 3.5-4 Gm. daily, a range often used as the laboratory "definition" of the nephrotic syndrome. It is apparent (see page 393) that a

*The determination of creatinine concentrations in serum in close temporal proximity to the 24 hour urine collection provides all the data necessary for the conventional clearance formula $\left(\frac{UV}{P}\right)$ to calculate endogenous creatinine clearance, a valuable test to estimate glomerular filtration rate. Thus, if the 24 hour urine volume is 2 liters (i.e., 1.38 ml./min.—it must be converted to ml./min. to be used as V in the formula), urine creatinine concentration is 50 mg./100 ml. (U) and serum creatinine concentration is 2 mg./100 ml. (P), the creatinine clearance $= \frac{50 \times 1.38}{2} = 34.5$ ml./min.

host of glomerular abnormalities may be associated with proteinuria of this degree: glomerulonephritis, membranous nephritis, diabetes, systemic lupus erythematosus, amyloid disease and others. In these instances, quantitative determinations of proteinuria may also be a most valuable guide to response to therapy.

Less than 1 Gm. per day of proteinuria ("minimal") suggests illnesses with far less glomerular involvement: pyelonephritis, nephrosclerosis, hypercalcemia, obstruction, tumors, stones, et cetera.

Proteinuria of "moderate" degree (1-3.5 Gm. daily) covers a very broad spectrum of illnesses and may be of less diagnostic value.

"Functional" proteinuria, perhaps more properly referred to as *reversible proteinuria,* is a term generally applied to transient proteinuria occurring particularly during the course of a febrile illness or after exercise. The mechanism is poorly understood. The clinician must also be aware of the fact that patients with underlying renal disease and minimal proteinuria may have further increase in protein excretion with illness and exercise. It is, therefore, important in individual patients to be certain that the abnormal proteinuria has disappeared several days after illness or exercise. This may be done by examination of a concentrated urine.

"Postural" proteinuria is an interesting phenomenon which in recent years has received renewed interest. The mechanism is not clear, although renal vasoconstriction, perhaps secondary to peripheral venous pooling, has been invoked. While postural proteinuria has traditionally been regarded as a benign phenomenon, recent information makes it clear that this is not necessarily the case, especially in the adult. Thus, patients with known renal disease may have postural exaggeration of their proteinuria. Furthermore, King followed a group of "healthy" males with postural proteinuria for an average of six years; 30% of them developed continuous, persistent proteinuria.[8] In another series, focal glomerular abnormalities were observed by renal biopsy in half the patients with postural proteinuria; while there was no instance of continuous proteinuria or renal insufficiency after five years, there was an increased number of abnormal urine sediments.[9]

In adolescents and younger children, postural proteinuria is likely to have little clinical significance, but we believe the finding should be followed by determination of serum creatinine, urine culture, quantitative estimates of proteinuria and follow-up to be certain it disappears, as it probably will.

The adult with postural proteinuria should have a more extensive renal assessment and follow-up. In "pure" postural proteinuria the *total* 24 hour excretion of protein collected as previously described seldom exceeds 1 Gm. On the other hand, in these same individuals, the total 24 hour protein excretion collected entirely during *recumbency* should not exceed 150 mg. If it does, this is then classified as asymptomatic, continuous, persistent proteinuria with postural exaggeration in a patient presumed to have renal disease. It is often helpful to combine a study of postural influences with a total 24 hour collection. This can be done as follows: The patient voids and discards at 7 a.m. and collects all urine thereafter in a single bottle. He then assumes the recumbent posture in bed at 8 p.m. At 10 p.m. he voids into the *same* bottle without getting out of bed. The next morning at 7 a.m., *before rising,* he voids into *another* bottle. The sum of the urine in the two bottles is the 24 hour collection, and the second represents urine voided during recumbency. In the patient with "pure" postural proteinuria, the total urinary protein will likely exceed 150 mg. and be less than 1 Gm., while the portion voided during recumbency (the second bottle) should not exceed 75 mg.

"Asymptomatic" persistent proteinuria, i. e., over 150 mg. daily in the adult, whether exaggerated by the upright posture or not, must be assumed to represent renal disease, and the patient should have an appropriate diagnostic and renal functional assessment. Many experts feel that if all ordinary procedures fail to establish a diagnosis, renal biopsy should be done. We are less certain of this generalization but feel that in these patients, if biopsy is done, preparation for electron microscopic examination of the material should be included because structural abnormalities may be minimal. Although persistent asymptomatic proteinuria usually represents renal disease, the prognosis is not clear, and the biopsy may or may not add perspective in this regard. In some instances the proteinuria represents minimal, non-progressive, inactive disease. In others, the disease may be slowly progressive for many years, while in others, deterioration may move ahead more rapidly. With or without biopsy, these patients should be followed at regular intervals with good urinalysis, urine culture and proper estimates of renal func-

tion, including creatinine clearance and quantitative estimates of proteinuria.

Summary

Proteinuria is a common abnormality. Its interpretation is dependent upon the history, physical examination and laboratory tests including proper urinalysis, serum creatinine concentration, creatinine clearance and *quantitation* of the proteinuria. Unless the specific diagnosis is clear, urinary and plasma electrophoresis should also be carried out to identify the protein. Renal biopsy may be required in certain instances. Patients with functional proteinuria should be followed to be certain that the protein disappears. Postural proteinuria in the adult may not have a benign outlook. Asymptomatic, continuous proteinuria of more than 150 mg. daily almost always is indicative of renal disease.

References

1. Lippman, R. W.: Urine and the Urinary Sediment (2d edition), Springfield, Ill., Charles C. Thomas, Publisher, 1957.
2. Kark, R. M.; Lawrence, J. R.; Pollak, V. E.; et al: A Primer of Urinalysis (2d edition) New York, N. Y., Hoeber Medical Division, 1963.
3. Levinsky, N. G.: The Interpretation of Proteinuria and the Urinary Sediment. DM, 3-40 (Mar.) 1967.
4. De Wardener, H. E.: The Kidney, An Outline of Normal and Abnormal Structure and Function, (3rd edition) Boston, Little, Brown and Co., 1967.
5. Hiller, A.; McIntosb, J. F., and Van Slyke, D. D.: Excretion of Albumin and Globulin in Nephritis, J. Clin. Invest. 4:235-51, 1927.
6. Lowry, O. H.; Rosebrougb, N. J.; Farr, A. L.; et al: Protein Measurement with the Folin Phenol Reagent, J. Biol. Chem. 193:265-75 (June) 1951.
7. De Luna, M. B. and Hulet, W. H.: Urinary Protein Excretion in Healtby Infants, Cbildren, and Adults, Proc. 1st Ann. Meet. Am. Soc. Nepbrol., p. 16, Los Angeles, Cal., Oct. 18, 1967.
8. King, S. E.: Albuminuria (Proteinuria) in Renal Diseases. II. Preliminary Observations on the Clinical Course of Patients with Ortbostatic Albuminuria, New York J. Med. 59:825-32, 1959.
9. Lecocq, F. R.; McPbaul, J. J., and Robinson, R. R.: Fixed and Reproducible Ortbostatic Proteinuria. V. Results of a 5-Year Follow-up Evaluation, Ann. Int. Med. 64:557-69 (Mar.) 1966.

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The Glomerulopathies

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The renal glomerulus is the anatomic locus for ultrafiltration of blood which, after modification by the tubules, is excreted as urine. Any disease process, herein referred to as glomerulopathy, in which the initial or most significant structural change is in the glomerulus, may alter the quality and quantity of glomerular filtrate and thereby threaten the preservation of any of several homeostatic mechanisms. Table 1 lists the more important glomerulopathies. Although this grouping of diverse diseases may seem irrelevant to the clinician, there are several advantages to be gained by focusing on the glomerulopathies associated with them. First, the presence of similar clinical manifestations, such as nephrotic syndrome in patients with diabetes mellitus, rheumatoid spondylitis and systemic lupus erythematosus, can be explained when it is understood that they all have in common increased permeability of the glomerular basement membrane (GBM) to plasma proteins. Second, glomerular diseases may cause characteristic functional changes in glomerular-tubular balance which, as proposed by Bricker, may be of great value in both differential diagnosis and therapy. Third, the application of immunofluorescent staining techniques to renal biopsy specimens can demonstrate immunological reactions in the glomerulus. The latter is of limited therapeutic value at present, but may offer hope for the future when the discovery of more specific immunosuppressive methods allows the prevention or cure of immunologically produced glomerulopathies.

This article will be concerned with the normal and abnormal anatomy of the glomerulus, the pathogenesis and clinical forms of certain glomerulopathies, and will consider concepts of immunosuppressive therapy.

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Normal and Abnormal Anatomy of the Glomerulus

An average glomerulus in the adult is a rounded structure 0.2 to 0.25 mm. in diameter with a volume of 0.0000042 ml. It is a richly branched and inter-connected capillary network which indents the beginning of the tubular duct. The afferent arteriole divides into four to six branches, each of which gives off numerous capillary branches to form a lobule. There are as many lobules as there are primary branches of the afferent arteriole. The glomerular capillaries wind around a common axis

Table 1.—Glomerulopathies

ACUTE AND SUBACUTE FORMS
- Streptococcal glomerulonephritis
- Viral glomerulonephritis?
- Goodpasture's syndrome
- Subacute glomerulonephritis
- Focal glomerulonephritis
- Toxemia of pregnancy
- Thrombotic thrombocytopenic purpura
- Uremic-hemolytic syndromes
- Schonlein-Henoch's syndrome
- Glomerulitis of infective endocarditis
- Wegener's granulomatosis

CHRONIC FORMS
- Lipoid nephrosis
- Membranous glomerulonephritis
- Chronic glomerulonephritis
- Mixed glomerulonephritis

VASCULAR
- Benign and malignant hypertension
- Scleroderma
- Hypersensitivity angiitis
- Polyarteritis nodosa

METABOLIC
- Diabetic glomerulopathy
- Amyloidosis
- Hereditary nephritis
- Fabry's disease

COLLAGEN
- Systemic lupus erythematosus
- Rheumatoid arthritis

CHEMICAL
- Tridione, penicillamine, mercury, etc.

MISCELLANEOUS
- Cirrhotic glomerulopathy
- Dysproteinemic glomerulopathies: Multiple myeloma, etc.
- Sarcoidosis
- Quartan malaria
- Radiation nephritis

in a spiral fashion. This axis seems to be an extension of a central glomerular stem which extends from the vascular pole to the periphery and is known as the mesangium or glomerular stalk. The mesangium is the only point of fixation of the capillaries; the remainder of the wall is free in the lumen of Bowman's space, permitting the plasma ultrafiltrate to drop into the tubular lumen. The mesangial cells are metabolically active; they perform phagocytic and other functions as well as provide capillary support.

The high resolving power of the electron microscope has allowed identification of three layers in the peripheral part of the capillary loop: a basement membrane lying between an inner endothelial and outer epithelial layer (Fig. 1). The cytoplasm of the endothelial cell forms a fine layer pierced by pores lining the whole of the peripheral part of the capillary loop. The GBM forms a continuous layer that is, at least in part, mucopolysaccharide. It is believed that the GBM is the real barrier to the ultrafiltration of plasma. The epithelial cell is larger and more complex, with numerous prolongations of the cytoplasm attached to the GBM by fine processes (pedicels or foot processes).

The morphological manifestations of glomerular injury are limited, which explains the similarity in appearance of glomeruli affected by different diseases. In general, the glomerular response to an acute insult is in the form of an increase in the number of cells, mainly endothelial cells; the pathologist describes this as proliferative glomerulonephritis. When numerous polymorphonuclear cells are seen, the term exudative glomerulonephritis is used. A rapid progression of these acute changes may lead to the formation of an exudate in the Bowman's space, with hyperplasia of the epithelial cells and formation of crescents; these are considered the hallmark of subacute glomerulonephritis. Some glomerulopathies have the potential to destroy the glomerulus slowly; this may appear at its end stage as a fibrosed or hyalinized mass.

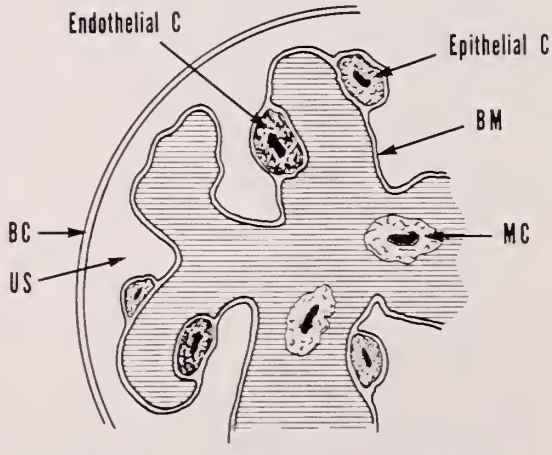


Fig. 1.—Schematic representation of a glomerular lobule to show the relationship of glomerular basement membrane, epithelial cell, mesangial cell and endothelial cell. US=urinary space. BC=Bowman's capsule. MC =mesangial cell.

In acute streptococcal glomerulonephritis the proliferative changes are accompanied by electron-dense deposits, called "humps," on the epithelial side of the GBM (Fig. 2). In lupus glomerulopathy electron-dense deposits are also seen, but they are located predominantly on the endothelial side of the GBM. Immunofluorescent techniques have demonstrated that these deposits contain immunoglobulin and complement representing, in all likelihood, an immunological reaction.

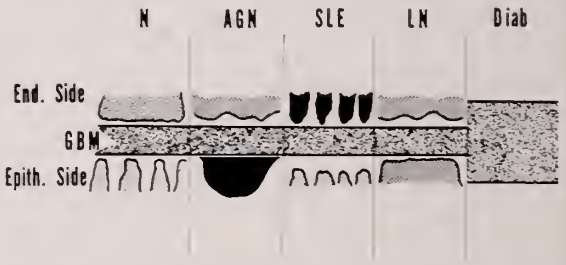


Fig. 2. — This diagram shows the glomerular basement membrane (GBM) between the endothelial cytoplasm and the podocytes. In acute glomerulonephritis (AGN) the deposits (humps) occur on the epithelial side. In systemic lupus erythematosus (SLE) the deposits usually occur on the endothelial side. In lipoid nephrosis (LN) there is fusion of podocytes but without deposits. In diabetic glomerulopathy there is a thickening of the GBM. (Electronmicroscopy).

Membranous glomerulonephritis is a descriptive term introduced by Bell to indicate a thickening of the GBM in the absence of proliferative changes. Electron microscopy has shown that in many instances this thickening is not real, but that numerous electron-dense deposits within or on either side of the GBM give that false appearance on light microscopy. This lesion is frequently seen in the nephrotic syndrome of adults. In many cases these deposits give a positive immunofluorescent reaction, suggesting that membranous glomerulonephritis may be another form of immune glomerulopathy. On the other hand, lipoid nephrosis of children is characterized by fusion of the foot processes of the epithelial cells, but absence of both deposits and immunofluorescent reaction of the GBM. On light microscopy the glomerulus looks normal, and the term "minimal glomerular

changes" has been used by some pathologists for reasons obscure to the authors.

The initial glomerular change in diabetes mellitus is probably an increase in the mesangial matrix followed by a true thickening of the GBM and, in a later stage, the formation of the typical nodular lesions described for the first time by Kimmelsteil and Wilson.

Pathogenesis

The pathogenetic mechanisms involved in the origin of the glomerulopathies are multiple, and frequently more than one is in operation. We will discuss four of them briefly: ischemia, metabolic abnormalities, coagulation defects and immunologic reactions.

Ischemia.—Occlusive disease of the afferent arterioles or arcuate arteries leads to severe ischemia of the glomerulus in malignant hypertension and certain cases of scleroderma. The glomerular lesions are characterized by proliferative changes, fibrinoid necrosis, and finally, complete hyalinization. In benign hypertension this mechanism probably is responsible for the shrinkage and thickening of the GBM.

Metabolic Abnormalities.—An unknown disturbance of carbohydrate and glycoprotein metabolism has been proposed as the cause of the GBM thickening and nodular lesion of diabetic glomerulopathy. A genetic defect in lipid metabolism is suspected as the pathogenetic mechanism of hereditary glomerulonephritis. An excess filtration of abnormal plasma proteins may be the cause of the glomerulopathy of multiple myeloma, macroglobulinemia and cirrhosis. The metabolic abnormality responsible for deposition of amyloid in the glomerulus is unknown.

Coagulation.—In thrombotic thrombocytopenic purpura and the hemolytic uremic syndrome, glomerular capillaries are occluded by eosinophilic thrombi and deposits of fibrinoid material; glomerular tufts show varying degrees of hyalinization. Experimentally, glomerular destruction associated with deposition of fibrinoid material can be prevented in certain cases with high doses of anticoagulants although GBM injury and proteinuria continue.

Immunologic Reactions.—For more than 50 years, it has been suspected clinically that glomerulonephritis is an immunologic disorder. During the last decade the work of numerous investigators, particularly that of Dixon and his colleagues, demonstrated an immunologic mechanism operating in different models of experimental glomerulonephritis and, recently, in certain cases of human glomerulonephritis.

Two distinct pathogenetic mechanisms have been demonstrated whereby the antibody response of the host may cause glomerulopathy. One mechanism is based upon production by the subject of antibodies capable of reacting with his own GBM. The other depends upon the subject's producing antibodies capable of reacting with nonglomerular endogenous or exogenous antigen(s) in his circulation with the resultant formation of circulating antigen-antibody complexes which are, for non-immunological reasons, subsequently trapped in the glomerular capillary walls. Either of these processes serves to concentrate an antigen-antibody reaction in the glomerulus; there it causes inflammation via mediators such as complement and the lysozymes of polymorphonuclear leukocytes.

The first of the above mechanisms is known as the nephrotoxic (Masugi) type of nephritis. With electron microscopy the appearance of fine electron-dense material on the endothelial side of the GBM is shown; by immunofluorescent techniques the GBM has the appearance of a ribbon-like homogenous line. This mechanism has been demonstrated by Dixon to be present in all cases of Goodpasture's syndrome, less than half of cases of subacute glomerulonephritis, and a smaller proportion of cases of chronic glomerulonephritis.

Deposits on the endothelial or epithelial side of the GBM, as demonstrated by electron microscopy, characterize the second mechanism: antigen-antibody complex glomerulopathy. With immunofluorescent technique the GBM has an irregular or lumpy appearance. In man, this mechanism appears well established in the pathogenesis of lupus glomerulopathy, acute streptococcal glomerulonephritis, and possibly in the nephrosis accompanying quartan malarial infection.

In either mechanism the etiologic factor which triggers the production of antibodies is still unclear. In acute streptococcal glomerulonephritis, cell-wall factors of nephritogenic strains of streptococci may be responsible. In lupus glomerulopathy, circulating antibodies probably play an important role. Certain viral infections are thought to be possible causes of the immunological reactions responsible for glomerular damage.

Clinical Forms

Clinical expression of the glomerulopathies depends upon the nature, extent, severity, and

acuteness of glomerular damage. The four most common clinical forms are: latent glomerulopathy, acute glomerulitis, nephrotic syndrome, and chronic renal failure.

Latent Glomerulopathy.—A glomerular lesion can have an abnormal urine as its only clinical manifestation. This clinical situation is not rare and confronts the physician with a therapeutic and prognostic dilemma: the potential of the glomerulopathy to produce advancing destruction of the kidney versus the possibility of the glomerulopathy remaining stable for years. When neither treatment for nor data on the natural history of these diseases was available, an exact diagnosis was only of academic relevance. Now, however, the use of electron microscopy and immunofluorescent techniques in renal biopsy specimens and the current data on diseases thereby categorized may provide the information needed to answer the question of whether or not to treat a specific latent glomerulopathy.

Acute Glomerulitis.—The clinical counterpart of an acute severe injury to the glomerulus is hematuria, RBC casts, oliguria, proteinuria, and hypertension. The best-known example is acute post-streptococcal glomerulonephritis. Another form, of variable etiology, is subacute glomerulonephritis, characterized by progressive destruction of the nephrons in less than 18 months. An interesting form of acute glomerulitis is the so-called "focal glomerulonephritis," which implies that only some glomeruli are affected or that one or more lobules (local) of many glomeruli are involved. The etiology and prognosis of this form are unknown, and the principal clinical manifestation is recurrent hematuria. Goodpasture's syndrome is a rapidly progressive, necrotizing glomerulitis associated with a necrotizing vasculitis of the lung, causing pulmonary infiltrates and hemoptysis.

In acute glomerulitis, when the involvement is extensive, there is a decrease of the glomerular filtration rate (GFR) which is reflected by azote-

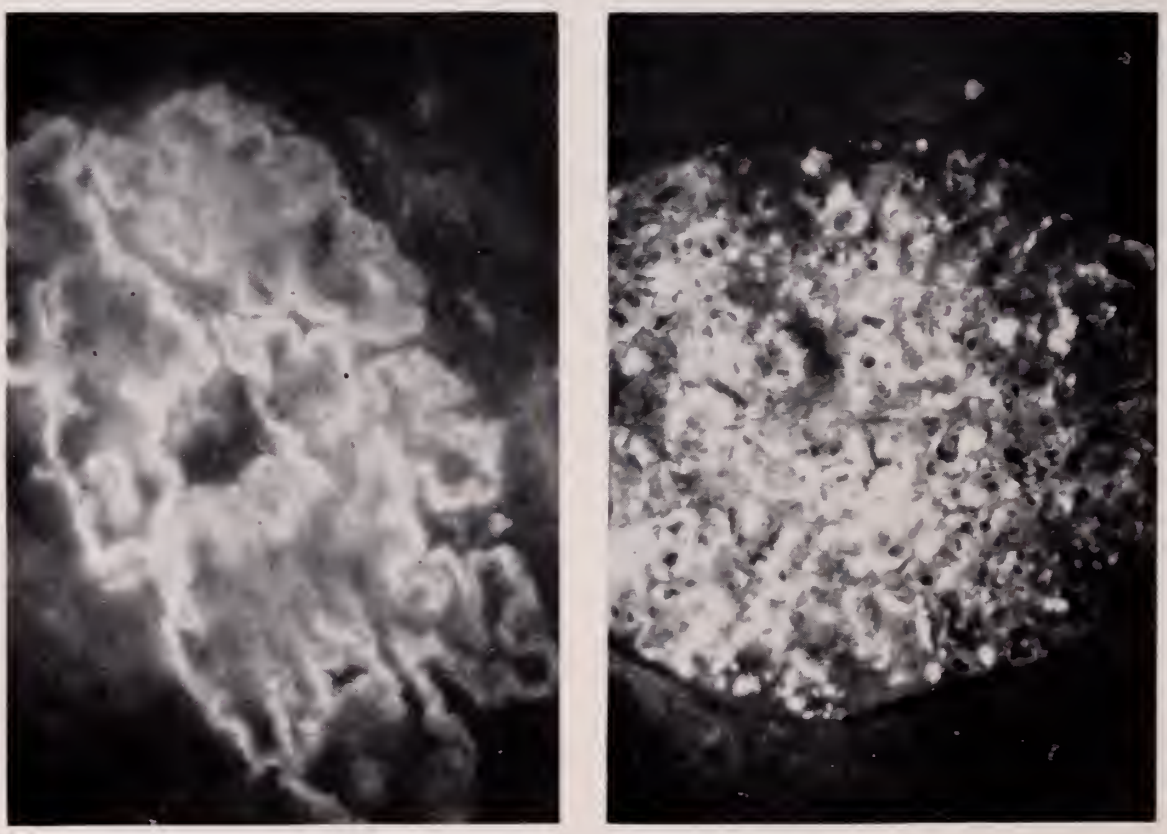


Fig. 3.— Immunofluorescent technique applied to renal biopsies. Left: An example of a glomerulus with linear deposit of fluorescent anti-7s globulin on the basement membrane. Right: Glomerulus from a patient with post-streptococcal glomerulonephritis demonstrating the diffuse "lumpy-bumpy" deposit of fluorescent anti-7s globulin.

Slides like these are prepared as follows: Specific proteins of interest, such as gamma globulin, complement components or fibrinogen, are injected into rabbits or goats until high titers of specific antibody are achieved. The antibody is then harvested, purified, and labeled with fluorescein isothiocyanate. Tissue slices are exposed to the labeled antibody, washed, prepared on microscope slides, and viewed through a microscope with quartz lenses and an ultraviolet light source. The labeled antigen-antibody complex glows green-yellow. (Specimens kindly provided by Dr. Donald Levi)

mia. In the initial stages the GFR per nephron is decreased without an appropriate reduction in tubular reabsorption of the filtered solutes and water. Bricker has described this physiological event as a glomerular-tubular imbalance in which the urine sodium is low (<20 mEq/L), the urine: plasma creatinine ratio is greater than 20, and the urine may be hyperosmolar to plasma. A positive balance of water and sodium with expansion of the extracellular fluids is the consequence of this derangement and explains some of the cardiovascular findings of acute glomerulopathies.

Nephrotic Syndrome.—The term nephrosis is etymologically meaningless, but for generations of physicians it has had a precise clinical implication: the association of edema, heavy proteinuria, hypoproteinemia and hyperlipemia. Perhaps a more rational nosologic substitute would be "protein-losing nephropathy."

All forms of glomerulopathies can cause a nephrotic syndrome. When the etiology cannot be determined, the patient is considered to have a primary nephrotic syndrome of which two distinct types have been recognized. One, usually seen in children, is lipoid nephrosis, which has a good prognosis and a tendency to spontaneous regression in a vast majority of the cases. The other type is characterized by deposits which may be associated with thickening of the GBM, proliferation of cellular elements, or a combination of both. This type seldom exhibits a spontaneous recovery and, in many instances, slowly progresses to uremia.

Chronic Renal Failure.—The well-known syndrome of chronic uremia is often the end result of a glomerulopathy which has severely reduced the GFR. Uremia may follow the previously described syndromes, but more often is seen *de novo* as the terminal clinical event of previously unrecognized chronic renal disease.

An important type of glomerular-tubular imbalance has been described by Bricker in chronic glomerulopathies when the GFR is significantly diminished. Through a process of adaptation the GFR of the individual surviving nephrons may increase, despite an overall decrease of the GFR. In this situation the water and solutes filtered may exceed the tubular capacity for reabsorption, causing excess urinary water and sodium losses, and leading to a contraction of the plasma volume and worsening of renal function. The therapeutic implications of this functional change are discussed in another article of this symposium. (See article by Dr. Vaamonde on page 405).

Treatment

The future treatment of renal diseases precipitated by immune mechanisms must be geared to the prevention of additional or continuing glomerular damage. If end-stage renal failure cannot be averted, then the limiting factor for survival will continue to be the availability of maintenance hemodialysis and renal transplantation. We shall, therefore, omit discussion of the usual treatment of the disease processes mentioned and address ourselves to the problems of present and future immunosuppressive therapy.

The classic immunosuppressive method of total body irradiation should be mentioned for the purpose of excluding it as an effective modern method. Radiation works by destroying small, immunologically competent lymphocytes; it causes too many undesirable effects to be of value. The adrenocortical steroids have been used alone and in combination with antimetabolites with variable success in the treatment of all the glomerulopathies mentioned where an immune mechanism is operative. It should be noted, however, that the action of steroids many be only anti-inflammatory. Most of the antimetabolites have as their limiting factor severe depression of circulating leukocytes and platelets. In common with steroids, they also predispose patients to overwhelming bacterial and viral infection and infection with opportunistic pathogens such as pneumocystis carinii and cryptococci. Azathioprine (Imuran®), which is enjoying current popularity for suppression of transplant rejection, is a chemically modified form of 6-mercaptopurine into which it is converted after absorption. There is, as yet, no good evidence of real advantage over the parent drug.

The search for a more nearly specific type of immunosuppressant resulted in the development of anti-lymphocyte serum (ALS) and its more specific derivative, anti-lymphocyte globulin (ALG). ALS and ALG specifically destroy immunologically competent lymphocytes so that antibody production is impaired. Although this substance appears to be of great value in decreasing the rate of rejection of transplanted kidneys, its lack of specificity renders the body susceptible to the ravages of other antigens against which it may no longer have protection. Local and systemic reactions to ALS and ALG are also problems.

Currently, there is exciting investigation into what appear to be highly specific immunosuppressive agents. One of these involves the administration of the antibody itself in doses sufficient to block the phagocytosis of antigen by macrophages and/or to block the attachment of small lymphocytes to antibody processed by macrophages. This prevents the lymphocytes from receiving the stimulus to differentiate into plasma cells for the production of specific antibody, but leaves them free to respond to any other processed antigens which may come their way. This, of course, leaves the body fully protected against other invading antigens and the glomerulus protected from the offending specific antigen-antibody complexes. The other method under investigation is the combination of specific antibody with one of the antimetabolites in an effort to induce immune tolerance; i. e., the host reaction is modified so as to treat the foreign protein as "self" rather than "non-self," thereby eliminating the need to produce antibodies against it. Both of these methods are in the experimental stage, and there is, as yet, no direct evidence that they will be effective in humans. However, it is in this area that some hope resides for the successful treatment of many glomerulopathies.

Bibliography

Blainey, J. D.; Brewer, D. B.; Hardwicke, J., and Soothill, J. F.: The Nephrotic Syndrome, Diagnosis by Renal Biopsy and Biochemical and Immunological Analyses Related to Response to Steroid Therapy, Quart. J. Med. 29:235-256 (Apr.) 1960.

Bricker, N. S.; Klahr, S.; Lubowitz, H., et al: Renal Function in Chronic Renal Disease, Medicine 44:263-288 (July) 1965.

Dixon, F. J.: The Pathogenesis of Glomerulonephritis, Am. J. Med. 44:493-498 (Apr.) 1968.

Fisher, E. R. and Perez-Stable, E. C.: Cirrhotic (Hepatic) Lobular Glomerulonephritis. Correlation of Ultrastructural and Clinical Features, Am. J. Path. 52:869-889 (Apr.) 1968.

Fisher, E. R.: Perez-Stable, E. C., and Pardo, V.: Ultrastructural Studies in Hypertension. I. Comparison of Renal Vascular and Juxtaglomerular Cell Alterations in Essential and Renal Hypertension in Man, Lab. Invest. 15:1409-1433 (Sept.) 1966.

Jennings, R. B. and Earle, D. P.: Post-streptococcal Glomerulonephritis: Histopathologic and Clinical Studies of the Acute, Subsiding Acute and Early Chronic Latent Stages, J. Clin. Invest. 40:1525-1595 (Aug.) 1961.

Michael, A. F.; Vernier, R. L.; Drummond, K. M., et al: Immunosuppressive Therapy of Chronic Renal Disease, New England J. Med. 276:817-828 (Apr.) 1967.

Pollak, V. E.; Pirani, C. L., and Schwartz, F. D.: The Natural History of the Renal Manifestations of S.L.E., J. Lab. Clin. Med. 63: 537-550, 1964.

Singer, D. B.; Hill, L. L.; Rosenberg, H. S., et al: Recurrent Hematuria in Childhood, New England J. Med. 279:7-12 (July 4) 1968.

Vassalli, P. and McCluskey, R. T.: The Coagulation Process and Glomerular Disease, Am. J. Med. 39:179-183 (Aug.) 1965.

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Infection of the Urinary Tract
Newer Concepts and Treatment

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Recent clinical and epidemiological studies have succeeded in altering some of our concepts of the prevalence of infection of the urinary tract and have begun to clarify the significance of bacteriuria, especially when "asymptomatic." In addition, experimental studies continue to increase our understanding of the pathogenesis of urinary tract infection and the role of host-defense mechanisms. Some of these observations offer important clues to prevention. Finally, a rational approach to the long-term management of chronic pyelonephritis utilizing corrective surgery, newer antibiotics, and careful follow-up holds promise of a better outlook for this important and disabling problem.

Following a brief survey of some of the changing concepts in definition, diagnosis, and defenses, consideration will be given to newer approaches to treatment and prevention.

Definition of the Problem

Accumulating clinical and experimental evidence now confirms that the major pathway by which the kidneys become infected is by the "ascending" route. Organisms enter the bladder via the urethra and ascend to the renal parenchyma where they invade and multiply predominantly in the renal medullary tissue. The hematogenous route appears to be much less important in the pathogenesis of pyelonephritis. "Lower" urinary tract infection (cystitis) represents, therefore, an important stage in infection of the kidney itself. Because cystitis is associated with prominent clinical symptoms—dysuria, frequency and nocturia—it is the condition which most frequently causes the patient to seek medical attention. Acute cystitis is ordinarily self-limited, and symptoms usually subside even without treatment. A relatively silent phase—"asymptomatic bacteriuria"—may intervene in many cases before clinical symptoms of pyelonephritis, such as fever and costovertebral angle tenderness, are manifest. It is also apparent that cystitis may be relatively asymptomatic. Lower urinary tract infections are apparently not usually associated with significant immunological responses to the infecting organisms, in contrast to the production of Ig G (7S) antibodies to the somatic (0) antigens of gram negative bacteria which occurs in upper tract infection (pyelonephritis).[1]

Asymptomatic bacteriuria emerges as a significant finding—at least in certain groups of patients in whom it appears to be a clue to underlying pyelonephritis; a phase in a disease continuum which may culminate in chronic renal insufficiency. Thus, asymptomatic bacteriuria in pregnancy was a harbinger of subsequent symptomatic urinary tract infection in 30% of bacteriuric patients, in contrast to 1.8% of non-bacteriuric patients who developed pyelonephritis of pregnancy.[2] Treatment of bacteriuria during pregnancy appears successful in averting this course in about three fourths of patients. Additional significance has been given to the finding of asymptomatic bacteriuria in pregnancy by the indication that it may also be associated with a high risk of fetal prematurity. Of less certain significance is the observation that bacteriuric women are also more likely to be hypertensive and that accelerated vascular disease may occur in bacteriuric diabetics.[3]

The significance of bacteriuria in other population groups—particularly elderly women—is less

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clear, and vigorous attempts at detection and treatment in this group are more controversial.[4]

Population studies have revealed a surprisingly high prevalence of bacteriuria—5% of adult females but less than 0.5% of adult males. Elementary school girls showed a prevalence of 1%, and the rate increases with age and parity. Since there appears to be a fairly constant "turnover rate" of bacteriuria, it has been estimated that 15-20% of the female population will at some time be infected.[3]

While acute pyelonephritis is easily identifiable as a bacterial infection, the definition of chronic pyelonephritis remains less clear. There is little doubt that one consequence of recurrent infection of the kidney is "chronic pyelonephritis," but identical anatomical changes can be produced by a variety of non-infectious causes.[5] The relative importance of other pathogenetic mechanisms resulting in "chronic pyelonephritis," however, is not certain.

Diagnosis

It is now relatively easy to identify certain factors which are associated with a high risk of the development of urinary tract infections. In the first place, it is a much more common problem in the female. Obstructive anatomical abnormalities of the urinary tract, including prostatic obstruction in the older male, are important predisposing factors. Others include pregnancy, diabetes, catheterization, and instrumentation of the urinary tract. In the case of diabetics, in fact, frequent catheterization of the bladder is clearly a major factor in initiating urinary tract infection.

A variety of diagnostic methods has been used, and several new techniques are now under investigation. Relying upon the detection of pus cells in the urine has important shortcomings as the principal sign of urinary tract infection. Examination of the stained or unstained urinary sediment for bacteria is a useful technique, but culture of the urine remains the final determinant.

Two aspects of culturing the urine should be stressed: the method of collecting, and the method of culturing. Since the distal urethra is normally colonized by bacteria, a voided or catheterized specimen may contain small numbers of organisms. Suprapubic needle aspiration of the bladder is, perhaps, the most reliable technique for collection, but less practical for routine use.[6] A voided specimen can be used if proper cleansing of the vulva is carried out. It is crucial that the urine be cultured promptly (or refrigerated) since multiplication in the urine after voiding will negate the value of the quantitative culture. It is this technique—that of estimating the concentration of bacteria—which makes it possible to distinguish between insignificant urethral colonizers and pathogens. A number of studies now indicate that the finding of less than 1,000 organisms per ml. indicates contamination, while the presence of greater than 100,000 organisms per ml. is regularly associated with significant infection. The confidence limits for "significance" of the quantitative technique are said to be approximately 80% for a single voided specimen and 95% for two voided specimens or a single catheterized specimen.[7] The quantitative technique can be adapted for routine laboratories by the use of calibrated bacteriologic loops. Other promising tests include miniaturized culture techniques and the use of chemical tests which indicate bacterial metabolism. The organisms responsible for initial urinary tract infection are the autogenous gastrointestinal flora. E. coli is the pathogen found in 70-90% of such infections, and most of the remainder are due to the Klebsiella-Aerobacter group. Recurrent or chronic infections and those acquired in the hospital through instrumentation are more frequently due to organisms such as Proteus, Pseudomonas, Streptococcus fecalis, and Staphylococcus. These organisms are also more likely to be resistant to the commonly used antibiotics.

Defenses

The role of obstructive lesions of the genitourinary tract in predisposing to recurrent infection and the importance of the introduction of bacteria into the bladder by catheterization and instrumentation already have been stressed. Recent studies have examined the role of defense mechanisms including phagocytosis, the bladder mucous membrane, antibodies and other antibacterial factors.[8] It is of interest that the renal medulla is much more susceptible to infection than the cortex. A possible explanation for this difference may be in the production of ammonia in the medulla which can inhibit the fourth component of complement and negate the bactericidal action of antibody. In addition, leukocyte inflammatory response in the medulla is impaired, presumably because of its increased osmolarity. It is the high osmolarity of this region which also permits the survival of bacterial protoplasts (aberrant forms without a rigid cell wall) which may represent the form in which latent infections persist in the urinary tract.

Treatment

Initial uncomplicated urinary tract infection will usually respond to one of a number of common antibiotics. It is important to select a relatively non-toxic agent, avoiding initially agents such as kanamycin, colistimethate, polymyxin B or chloramphenicol—or tetracycline during pregnancy. It is useful to culture the urine 48-72 hours after starting therapy since an effective agent almost always produces a response by this time. If the culture is not sterile at this time, another agent should probably be substituted. Despite a sterile culture, however, treatment should be continued for 10-14 days.

In recurrent infections it is important to search for correctable lesions of the genitourinary tract. Treatment of chronic pyelonephritis in general has been difficult, with failure rates as high as 90%. Studies by McCabe and Jackson,[9] however, indicate an approach which may yield better results. With the use of an appropriate antibiotic, after corrective surgery when possible, 80% of 252 patients showed initial clearing, although a third of these relapsed with the same organism usually within the first month of treatment. One third of the total group remained clear of infection for up to three years. Of significance was the fact that retreatment of relapses or reinfections resulted in long-term clearing of additional groups producing progressive increases in the total number attaining a bacteriological cure. Depending upon antibiotic sensitivities, similar results were achieved with chloramphenicol, nitrofurantoin, nalidixic acid, tetracycline, colistin, and various combinations, but sulfonamides were less effective.

A rational approach to chronic pyelonephritis appears, therefore, to include surgical correction of obstructive uropathy when feasible, treatment with an appropriate antibiotic, with repeat culture and sensitivities at 72 hours. If bacteria are not eradicated, another agent should be substituted based on repeat sensitivity studies; otherwise, the drug should be continued for approximately two weeks. Of key importance is a follow-up culture a week after ending therapy with prompt retreatment of bacteriological relapse. Additional follow-up should include cultures at a month, then perhaps at three monthly intervals for a year, and finally yearly cultures for several years.

Additional approaches of value appear to include the effort to achieve bactericidal levels of antibiotics in the urine,[6] and the use of synergistic combinations of certain antibiotics—for example, the combination of a penicillinase-resistant penicillin such as methicillin plus benzylpenicillin or ampicillin.[10]

Factors such as pH of the urine may be of great importance. Thus, methenamine mandelate (Mandelamine®) requires a urine pH below pH 5.5 to be effective. Acidifying agents such as ascorbic acid (4 Gm./day) may be helpful, but acidification is often virtually impossible in the presence of infections with urea-splitting bacteria such as Proteus vulgaris. On the other hand, drugs such as streptomycin and kanamycin require an alkaline pH for maximum effectiveness. This may often be achieved with sodium bicarbonate.

Prevention

Avoidance of unnecessary catheterization is a major preventive measure. When indwelling bladder catheters must be used, the occurrence of infection may be significantly reduced by strict adherence to aseptic techniques during catheterization, the use of sterile closed-system drainage, and antibacterial bladder rinses such as a mixture of polymyxin B and neomycin or one-fourth per cent acetic acid. The use of topical antibiotic lubricants during catheterization and for daily meatal care also appears to be helpful.

References

1. Vosti, K. L. and Remington, J. S.: Immunoglobulin Response in Patients with Infections of the Urinary Tract, Clin. Res. 14:345 (May) 1966-67.
2. Whalley, P.: Bacteriuria of Pregnancy, Am. J. Obst. & Gynec. 97:723-738, 1967.
3. Kass, E. H.; Savage, W., and Samtamarina, B. A. G.: The Significance of Bacteriuria in Preventive Medicine. In: Progress in Pyelonephritis, E. H. Kass, Editor. Philadelphia, F. A. Davis, p. 3, 1965.
4. Petersdorf, R. G.: Asymptomatic Bacteriuria: A Therapeutic Enigma. In: Controversy in Internal Medicine, F. J. Ingelfinger, A. S. Relman and M. Finland, Editors. Philadelphia, W. B. Saunders, p. 302, 1966.
5. Freedman, L. R.: Pyelonephritis and Urinary Tract Infection. In: Diseases of the Kidney, M. B. Strauss and L. G. Welt, Editors. Boston, Little, Brown and Co., pp. 469-500, 1963.
6. Stamey, T. A.; Govan, D. E., and Palmer, J. M.: The Localization and Treatment of Urinary Tract Infections: The Role of Bactericidal Urine Levels as Opposed to Serum Levels, Medicine (Balt.) 44:1-36 (Jan.) 1965.
7. Kass, E. H.: Bacteriuria and the Pathogenesis of Pyelonephritis, Lab. Invest. 9:110-116 (Jan.-Feb.) 1960.
8. Vivaldi, E.; Munoz, J.; Cotran, R., et al: Factors Affecting the Clearance of Bacteria Within the Urinary Tract. In: Progress in Pyelonephritis, E. H. Kass, Editor. Philadelphia, F. A. Davis, pp. 531-535, 1965.
9. McCabe, W. R. and Jackson, G. G.: Treatment of Pyelonephritis: Bacterial, Drug and Host Factors in Success or Failure Among 252 Patients, New England J. Med. 272:137-44 (May 20), 1965.
10. Sabath, L. D.; Elder, H. A.; McCall, C. E., et al: Synergistic Combinations of Penicillins in the Treatment of Bacteriuria, New England J. Med. 277:232-238, (Aug. 3) 1967.

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Reversible Nephropathies

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Reversible forms of renal disease are in general the result of toxic, metabolic, vascular or obstructive insults to the kidney and, from the anatomical standpoint, may be either relatively selective or disseminated. A complete consideration of this subject would have to include acute tubular necrosis, renal vein thrombosis, renal artery occlusion, transient forms of the nephrotic syndrome, as well as inflammatory conditions which heal instead of leading to progressive renal functional impairment, but such processes are beyond the scope of this essay.

Selective Disorders

The proximal tubule is largely devoted to the reabsorption of much of the water filtered at the glomerulus, together with bulk reclamation of the useful solutes contained in the filtrate. In addition to much of the salt filtered, including sodium, chloride, bicarbonate, phosphate, and potassium, practically all the filtered glucose and amino acids are reabsorbed from the proximal tubule. Conservation of all these materials, except water which is reabsorbed passively down the osmotic gradient created by sodium reabsorption, is effected by active transport processes requiring expenditure of energy. Impairment of these active transport functions may cause a striking triad of abnormalities, consisting of aminoaciduria, glycosuria, and raised renal phosphate clearance, with hypophosphatemia and consequent rickets or osteomalacia. A number of heavy metals are capable of damaging the kidney in this way, including mercury, lead, uranium, and cadmium; the acquired lesion is reversible to a considerable extent after removal of the offending agent, in contrast to the irreversible character of the same functional lesion (the Fanconi syndrome) when it is genetically determined.[1] Potassium wasting and a bicarbonate leak may less commonly be associated. Outdated tetracycline has been responsible for a few acquired cases of this kind; one seen at our institution was very severe,[2] but all appear to have been reversible. Paraproteinemias may cause a similar, if less correctable, disorder.

Defective proximal tubular transport of phosphorus or of glucose are both encountered as isolated functional lesions on a genetic basis, but acquired and reversible renal glycosuria is rare and isolated reversible "phosphate diabetes" unknown. Pregnancy physiologically decreases the maximum capacity of the proximal tubule to transport glucose (T_{mG}), sometimes producing mild transient renal glycosuria; the condition can also be produced experimentally by phloridzin, but isolated drug-induced renal glycosuria is rarely, if ever, observed clinically.

It appears that bicarbonate wasting—excess urinary HCO_3^- excretion in relation to plasma HCO_3^- concentration—may represent primarily either proximal or distal impairment in respect to H^+ secretion ("proximal" versus "distal" renal tubular acidosis or RTA). Bicarbonate "reabsorption" is really neutralization, for it results from the conversion of filtered HCO_3^- to H_2CO_3 by reaction with secreted H^+; the H_2CO_3 releases CO_2 which is then passively reabsorbed. A bicarbonate leak, therefore, represents quantitatively reduced H^+ secretion by the nephron as a whole in relation to plasma HCO_3^- concentration.

The defect, however, may reside predominantly in either the proximal or the distal nephron-segment. In distal renal tubular acidosis (RTA) it is the ability to secrete H^+ against a gradient which is at fault, rather than quantitative limitation on the rate of HCO_3^- transport as in the proximal form. For this reason distal RTA requires less alkali therapy, but in contrast to the proximal form a bicarbonate leak (inappropriately high urine pH) is demonstrable even during severe acidosis. A very curious transient form of the

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proximal type of RTA is seen in persons afflicted with hereditary fructose intolerance when they are given fructose. It is thought[3] that because of the characteristic deficiency in this disease of the enzyme fructose-1-phosphate aldolase, phosphorylated fructose accumulates in the renal cells, as well as elsewhere, and disrupts the energy production of the cell. H^+ secretion is disturbed, along with other transport processes; florid RTA results, reversible by withdrawal of the sugar. An analogous type of RTA has been reported in galactosemia.

In adolescents and adults, acquired RTA is likely to be irreversible, but in infants this condition has a good prognosis. It is apt to appear early in life and after a severe course of up to a year or more generally undergoes spontaneous complete remission. Occasionally isolated acquired RTA in the adult exhibits a spontaneous remission, and recently it has been shown that amphotericin B may produce severe but transient RTA.[4] By several months after withdrawal of the drug, restoration of normal function may be expected. In acquired RTA, the cause of the disease and of the remissions as well often remains obscure. The occasional primary genetic forms as well as RTA secondary to Lowe's syndrome, cystinosis, glycogenesis, and occasionally Wilson's disease, are probably all irreversible.

Hypercalcemia and hypokalemia both characteristically produce impairment of renal water conservation together with some other generally less prominent disorders of the function of the distal nephron segment.[5] Hypokalemia does not of itself compromise the glomerular filtration rate nor produce azotemia, although it may predispose to pyelonephritis, which can do so. By contrast, severe hypercalcemia is promptly associated with azotemia; however, transient milder hypercalcemia affects tubular function primarily.

Some degree of polyuria and inability to concentrate the urine are characteristic of both conditions and the maximal tubular reabsorption of water (T^cH_2O) is reduced. This function expresses quantitatively the kidney's capacity to dehydrate the urine as the maximal volume of water per unit time which can be extracted from luminal fluid which has reached isosmolality with plasma. It is generally determined by observing the effect of ample vasopressin during mannitol diuresis. There is evidence in both conditions that two factors contribute to reduced maximal water conservation by the kidney: inefficient trapping of osmotically active solute in the medullary interstitium, and damage to the collecting duct interfering with the ability of circulating vasopressin to increase the permeability of the duct to water.

It has been insufficiently realized that standard testing of the kidney's capacity to acidify the urine, using as an index the urine pH after ammonium chloride administration, may give a false impression of abnormality in the presence of any condition associated with polyuria. This is because the normal kidney can reduce urine pH to only about 5.1 during brisk water diuresis, the further fall to pH 4.5 in antidiuresis reflecting lesser net diffusion of NH_3 into low-flow urine.[6] The ammonium chloride test, therefore, must be cautiously interpreted in hypercalcemia and hypokalemia, since both conditions characteristically cause obligatory polyuria.

Potassium depletion produces metabolic alkalosis; this means that in the steady state the renal bicarbonate clearance is reduced, with blood bicarbonate inappropriately high for the particular acid-base load. This condition must reflect inappropriately high H^+ secretion into the nephrons; it is thought that the replacement of some K^+ by H^+ within the tubular cells may be responsible for this homeostatic error, which might very well be described as a kind of "renal tubular alkalosis." The observation that in clinical and experimental human potassium depletion the decline of urine pH elicited by standardized NH_4Cl testing is mildly subnormal has been interpreted to reflect limitation of the nephron's capacity to establish a cell-to-lumen pH gradient. It may be, however, that the associated polyuria affords a sufficient explanation of the findings, except where the kaliopenia is associated with aldosteronism, which appears to stimulate the secretion of K^+ at the expense of H^+.

Kaliopenia is characteristically a remediable nephropathy. It may predispose to infection and so lead to permanent damage, but otherwise is not proven to cause irreversible change. However, the characteristic renal functional abnormalities do not immediately respond to potassium repletion, and impaired water reabsorption may be demonstrable for many weeks thereafter.

The renal damage produced by hypercalcemia is transient only if the blood calcium is soon lowered; extreme hypercalcemia can destroy kidney function in a matter of days. Complete restoration of normal function, when it occurs after a

bout of milder hypercalcemia, may require several months. Although superficially resembling hypokalemia in the response of urinary pH to acid-loading, it seems that the fundamental change affecting acid-base regulation is reduction of H^+ secretion into the nephrons, the opposite of that characteristic of hypokalemia. Indeed, outright renal tubular acidosis may complicate hypercalcemia, in the absence of azotemia, generally in association with nephrocalcinosis.

Relatively Non-Selective Disorders

Conditions associated with compromised glomerular filtration are manifested by azotemia, and "relatively non-selective" conditions of a transient character will be considered to be those in which azotemia is associated with other renal functional defects. The three most important etiological groups which require consideration here are nephrotoxic drugs, obstructive uropathy, and prerenal azotemia.

The kidney is particularly exposed, as the prime excretory organ, to damage by drugs and poisons, and the list of nephrotoxins is too long for us to consider here.[7] Sulfonamides and many antibiotics sometimes damage kidney function acutely, but some notoriously nephrotoxic antibiotics, such as kanamycin, colistin and cephaloridine, are so valuable in the treatment of dangerous infections that their continued use is justified. It is, of course, imperative to follow the serum urea or creatinine while such antibiotics are being given so that they may be withheld at once should evidence of developing azotemia appear. Generally speaking, they seldom cause detectable renal damage short of a week. When azotemia has appeared, it will generally prove transient provided administration of the drug is stopped at once. Kunin[8] has compiled a useful guide to antibiotic dosage in patients who already have reduced renal function, and as a result develop raised blood levels on ordinary dosage.

Obstructive uropathy has recently been reviewed by Goldsmith.[9] Partial obstruction with hydronephrosis is a condition the possibility of which should always be borne in mind in the face of deteriorating renal function. It is a common and potentially reversible cause of, and especially contributor to, progressive renal failure. The renal damage produced consists of functionally (1) depressed glomerular filtration rate (GFR) due to (a) back pressure and (b) shunting of blood away from the glomeruli, and (2) defective tubular function, especially in respect to urine acidification and water conservation. Subnormal responsiveness to vasopressin, which has been ascribed to hyperperfusion of a reduced number of functioning nephrons, is often demonstrable. Prompt alleviation of the obstruction is important since it is capable of destroying nephrons especially when complicated by infection, as it so often is. Sometimes massive diuresis follows relief of the obstruction, ascribable to osmotic diuresis associated with elimination of retained urea (and sometimes administered glucose), as well as impaired water conservation. Though evanescent, the acutely negative balance of salts and water may urgently require vigorous replacement therapy.

When evaluating chronic azotemic renal failure of whatever etiology from the prognostic standpoint, and especially when considering the indications for chronic dialysis or renal transplantation, the possible role of factors capable of temporarily depressing renal function always deserves most careful consideration, for very small incremental burdens of prerenal or postrenal complications become critical in advanced renal disease. A high index of suspicion for prerenal as well as postrenal contribution to seeming deterioration of function in high grade renal disease will not infrequently be rewarded with many months, and sometimes years, of tolerably good health for the patient with conventional good medical management.

References

1. de Wardener, H. E.: The Kidney, Third Edition. Boston, Little, Brown and Company, 1967, pp. 209-221.
2. Cleveland, W. W.; Adams, W. C.; Mann, J. B., and Nyhan, W. L.: Acquired Fanconi Syndrome Following Degraded Tetracycline, J. Pediat. 66:333-342 (Feb.) 1965.
3. Morris, R. C., Jr.: An Experimental Renal Acidification Defect in Patients With Hereditary Fructose Intolerance. I. Its Resemblance to Renal Tubular Acidosis, J. Clin. Invest. 47:1389-1398 (June) 1968.
4. Douglas, J. B., and Healy, J. K.: Nephrotoxic Effects of Amphotericin B, Including Renal Tubular Acidosis, Am. J. Med. 46:154-167 (Jan.) 1969.
5. Relman, A. S., and Schwartz, W. B.: Effects of Electrolyte Disorders on Renal Structure and Function, In Renal Disease, D. A. K. Black, Ed., Second Edition, Philadelphia, F. A. Davis Co., 1967, pp. 754-774.
6. Hills, A. G., and Reid, E. L.: Renal Maintenance of Acid-Base Balance in Health, Johns Hopkins M. J. 120:368-379 (June) 1967.
7. Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, Third Edition, New York, The MacMillan Co., 1965.
8. Kunin, C. M.: A Guide to Use of Antibiotics in Patients With Renal Disease, Ann. Int. Med. 67:151-158 (July) 1967.
9. Goldsmith, C.: Postobstructive Diuresis, The Kidney 2:1-6 (Sept.) 1968. Published by National Kidney Foundation, New York, N. Y.

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Treatment of Chronic Renal Failure

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The dramatic advances observed in recent years in the treatment of chronic renal failure by means of dialysis and renal transplantation have overshadowed other forms of medical management that may contribute decisively to the welfare of many uremic patients. Medical management still has much to offer most chronically uremic patients, particularly in view of the fact that only a minority of these patients can receive maintenance dialysis or renal transplantation.

For many years it was accepted that the marked structural disorganization of the kidney resulting from progressive destruction of nephrons was accompanied by profound functional disorganization. However, in recent years, largely through the experimental work of Hayman, Platt and Bricker, it has become apparent that, in most forms of chronic renal disease accompanied by a marked reduction in nephron population, the nephrons that do continue to contribute to renal function behave, in a regulatory sense, as if they were normal.[1] According to Bricker's "intact nephron hypothesis,"[2] as renal disease progresses the remaining nephrons respond to changing needs of the patient with appropriate adaptations of glomerular and tubular functions. This new conceptual framework of pathophysiological events has resulted in better insight into many clinical abnormalities of chronic uremia and, most important, has enabled the physician to design appropriate therapy to support the functional capabilities of the chronically diseased kidney.

Medical Management of Chronic Renal Failure

Better understanding of the abnormalities of salt, water and nitrogen balance in chronic uremia has resulted in renewed interest in the dietary treatment of chronic renal disease. Certain aspects of this will be discussed in detail.

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Sodium and Water.—One of the perplexing problems confronting the physician in treating patients with chronic renal failure is the regulation of sodium intake. This, in the individual patient, poses the problems of sodium depletion on the one hand and sodium excess on the other. Either may result in disastrous consequences, and everyone occasionally encounters a patient for whom no satisfactory solution can be found. As progressive disease reduces the number of functioning nephrons, the absolute rate of sodium excretion per individual nephron must increase, and for a time external sodium balance can be maintained.[2] However, over and above these adaptive efforts of the individual nephrons, the continuing decrease in the total number of nephrons decreases the overall flexibility of the kidney in its ability to regulate sodium excretion. Therefore, in the continuous progression of renal disease, the upper and lower limits of sodium excretion will be progressively reset to new levels, with the spectrum of sodium overload, tight sodium balance, and salt wasting becoming clinically apparent.

The limits for permissible salt intake cannot be predicted; they must be defined for individual patients. The actual magnitude of these limits varies not only from patient to patient, but varies from one time to another in individual subjects in the course of renal disease. Some degree of renal salt wasting is present in virtually all patients with uremia. The large majority of patients, however, exhibit only minimal to moderate degrees of salt wasting, that is, 20 to 40 mEq of sodium per day (1 mEq of sodium equals 23 mg. of sodium). Very rarely is the renal sodium loss of extreme magnitude, that is, in the range of 100 to 200 mEq of sodium per day.

Figure 1 clearly illustrates the magnitude and consequences of renal sodium wasting commonly seen in patients with advanced renal disease. This patient exhibited marked salt wasting, weight loss, dehydration, increasing azotemia and the appear-

ance of acidosis and hyperkalemia after only a few days of salt deficit resulting from severe salt restriction. It is apparent that the absence of hyponatremia or oliguria during salt restriction does not exclude important renal salt wasting. These considerations are of practical significance since the low salt diet usually prescribed for treatment of hypertension or heart failure, the injudicious use of diuretics, and vomiting, coupled with the inability of the kidney to normally conserve sodium, are the most common causes of salt depletion. The consequence is extracellular fluid volume depletion and further decrease in glomerular filtration rate (GFR) which results in rapid clinical deterioration of patients with previously stable renal failure.

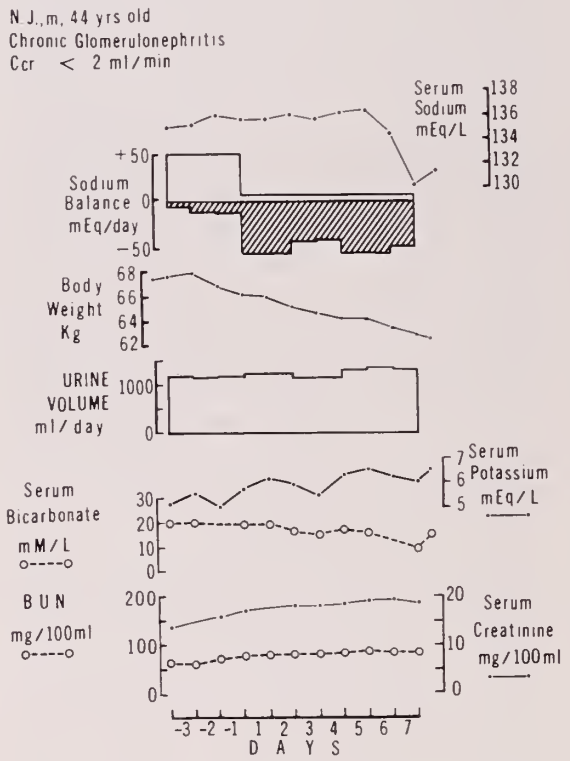


Fig. 1. — The patient was receiving a modified Giordano-Giovanetti diet (2,000 calories, 20 Gm. protein, 25 mEq of potassium) containing 50 mEq of sodium daily. When the intake of sodium was reduced to 10 mEq per day (day 1), a negative sodium balance appeared (shaded area in top panel). While a normal subject will achieve sodium balance in three to five days, this patient continued to waste 40 to 50 mEq of sodium daily throughout the observation. He lost weight, became dehydrated without evidence of oliguria, and developed more azotemia. Hyponatremia (top panel) was only apparent after several days of salt wasting. Acidosis and hyperkalemia also developed. Note that the scales for BUN and serum creatinine are set in such a way that the respective values are in a ratio of 10 to 1. Therefore, it is apparent that the BUN was relatively much less elevated than the serum creatinine, as expected in a patient receiving a low protein diet.

Sodium depletion is a reversible cause of progressive renal failure, and its prompt recognition and correction may restore a patient to relatively good health for a prolonged time.

On the other hand, when the capacity to excrete sodium is surpassed by excessive intake, sodium and water retention occur with progressive increase in weight. This may lead to a congested state of the circulation, hypertension, heart failure and pulmonary edema.

The simplest way to determine salt wasting is to measure the urinary sodium concentration. In the presence of dehydration, with or without hyponatremia, a urine sodium concentration of more than 10 to 15 mEq per liter in a random urine sample is suggestive of salt wasting. Confirmation can only be obtained by a sodium balance study. There are several ways of performing this. Table 1 outlines two methods we have used with success.

The details of the particular approach are less important than diligence in observing the patient clinically. The patient should understand the purposes and hazards of the dietary regimen, and he must receive written dietary instructions, obtain and record weights daily, and maintain close contact with his physician. After a period of increased salt intake, previous sodium depletion is shown to have existed by a stable increase in the weight of 1 to 2 kilograms and a measurable increase in creatinine clearance.

Water deprivation as a cause of dehydration is also seen in patients with chronic renal disease, particularly when access to water has been limited for any reason. On the other hand, the ability of patients to excrete water is also impaired. This inability to dilute the urine normally, coupled with the salt wasting state, explains most of the hyponatremia seen in these patients. Severe volume depletion requires rapid intravenous isotonic sodium chloride or sodium bicarbonate replacement. Hyponatremia, in the absence of volume depletion, represents excess water retention and should be treated with water restriction, not sodium administration.

Potassium.—As the number of functioning nephrons decreases, the kidney, nonetheless, retains the capacity to excrete potassium effectively and, therefore, to maintain an adequate balance. However, one should be aware of two limitations: First, the potassium excretory mechanism is working at near capacity levels; therefore, additional potassium loads may result in hyperkalemia. Second, the mechanism is dependent to a signifi-

cant degree on the characteristics of the transport of sodium by the distal nephron. Sodium depletion in these patients is generally accompanied by decreased potassium excretion and may result in hyperkalemia (Fig. 1).

Modest spontaneous elevations of serum potassium levels occur commonly in patients with severe azotemia. However, severe hyperkalemia (more than 7 mEq per liter) is uncommon until marked oliguria develops in the terminal phase of chronic uremia. Hyperkalemia may also result from various reversible complications of renal insufficiency even in patients with mild to moderate renal disease. Thus, dehydration and oliguria, acidosis, and accelerated catabolism (due to infection, trauma, burns, or other stress) may also result in hyperkalemia. Ingestion of excessive dietary potassium, potassium supplements, salt substitutes or drugs containing potassium are common causes of hyperkalemia. This is sometimes a perplexing problem in patients with stable chronic renal disease without oliguria. Certain diuretic agents, notably spironolactone and triamterene, may also induce hyperkalemia. If a patient has persistent hyperkalemia and apparently is receiving a low potassium intake (25 to 30 mEq per day) and his daily urinary excretion of potassium is relatively high (25 to 30 mEq), a detailed search for unsuspected exogenous sources of potassium is mandatory. Discontinuing all exogenous sources of potassium or correction of acidosis, dehydration, or salt depletion will frequently be sufficient to lower the elevated serum potassium.

Table I.—Estimation of Degree of Salt Wasting

Method I

1. Low salt diet (10 mEq sodium per day) for 4 to 5 days.
2. Record daily body weights and check vital signs frequently.
3. Measure serum electrolytes, BUN or creatinine frequently.
4. On days 4 and 5 measure 24 hour urinary excretion of sodium, potassium and creatinine.
5. Prescribe daily sodium intake 30-40 mEq above the minimal salt losses.

Method II

1. Standard 2 Gm. sodium chloride (34 mEq of sodium) hospital diet for four days (days 1 to 4).
2. During the following four days (days 5 to 8) 8 Gm. of sodium chloride (136 mEq) are added to the food daily.
3. On the last day of each regimen (days 4 and 8), the urinary excretion of sodium and creatinine is determined.
4. Body weight and plasma sodium concentration are measured daily.
5. The sodium content of the diet is selected within the range established.

Severe hyperkalemia, with or without electrocardiographic changes, requires rapid attention. The intravenous administration of hypertonic glucose with insulin (one liter of 10% glucose with 40 to 50 units of regular insulin) or of isotonic or hypertonic sodium bicarbonate will induce the transfer of potassium into cells and decrease the extracellular potassium concentration. These measures, although rapidly effective, are of transient nature. Furthermore, their usefulness may be curtailed by the large intravenous fluid volume necessary to be infused in some patients to reduce the elevated serum potassium. It has been our experience that dialysis will rarely be needed for the control of severe hyperkalemia under these circumstances. Cation-exchange resins are commonly used for this purpose.

For acute persistent hyperkalemia, Kayexalate®, a cation-exchange resin in the sodium cycle, may be used, preferably in the enema form. We have had very good results with the use of a combination of 30 Gm. of Kayexalate® and 50 Gm. of sorbitol dissolved with water to a volume of 200 ml. and given as a retention enema for at least 30 to 60 minutes. This procedure can be repeated every two to four hours until the serum potassium concentration is lowered to normal. Kayexalate® can also be used effectively without addition of sorbitol. The resin will exchange approximately 1 mEq of potassium for 1 mEq of sodium per gram of resin given.[3] The resin can also be administered orally (15 to 20 Gm. two to four times daily), but this is best done after initial control of hyperkalemia has been accomplished in order to prevent or smooth out potential subsequent rises in serum potassium. The major complication of resin therapy is sodium overload.

Acidosis.—Minimal to moderate acidosis requires no treatment. Therapy is usually reserved for patients in whom the serum bicarbonate is less than 15 mEq per liter, when labored breathing may become apparent and cause symptoms. Oral administration of sodium bicarbonate or sodium citrate,* if tolerated by the patient, may control acidosis.

It is important to recognize that some patients will feel more comfortable with a low plasma bicarbonate level than with the gastrointestinal disturbances associated with oral alkali therapy.

*Shohl's solution: 140 Gm. of citric acid and 98 Gm. of sodium citrate dissolved in water to a volume of 1 liter. One ml. of this solution contains 1 mEq of sodium. Total daily dose: 25 to 75 ml. of the solution taken in three divided doses diluted in water; ginger ale improves the taste.

Severe, life-threatening acidosis requires the administration of sodium bicarbonate intravenously. Raising the plasma bicarbonate concentration to about 15 to 18 mEq per liter is usually sufficient to relieve symptoms due to acidosis. Of equal importance is the recognition and correction of intercurrent events that upset the previously stable acid-base status of the patient. Excessive alkali therapy is marked by sodium retention, edema, alkalosis and sometimes by tetany.

Protein.—While the benefits of a low protein diet in renal disease have been known for many years, considerable attention has been recently given to this aspect of dietary management. Serious nutritional deficits are characteristic of untreated uremia. Oftentimes they are masked by fluid retention. Since uremia develops very slowly, large cumulative deficits of protein and fat may be evident by the time the patient seeks medical help. In the past, efforts to improve the nutritional state were often considered futile because severe nausea and vomiting, outstanding hallmarks of the uremic syndrome, appeared to interfere with an effective nutritional regimen. A diet for the uremic patient should contain (1) sufficient calories to exert a maximal protein-sparing effect and to prevent further losses of fat stores, and (2) aminoacids of appropriate quality and quantity to promote optimal protein synthesis. The protein-sparing action of carbohydrates is well known.[4] Nitrogen balance studies have shown clearly that a given intake of protein is associated with nitrogen equilibrium or positive balance if non-protein calories are provided in sufficient quantity; however, a negative balance ensues if energy requirements of the organism are not met.

A low protein diet (20 to 30 Gm.) will greatly decrease the blood urea nitrogen (BUN) concentration but will not affect the serum creatinine concentration (Fig. 1). This is usually accompanied by negative nitrogen balance. The significant contribution of the Italian investigators, Giovanetti and Giordano,[5,6] was the realization that by adding a minimal amount of essential aminoacids, or by giving all the proteins as essential aminoacids, a further decline in BUN was observed despite a less negative, or even a frankly positive, nitrogen balance. The results of this dietary regimen are most gratifying in many patients. The BUN decreases in all patients, and there is at least partial amelioration of symptoms, particularly those related to the gastrointestinal tract. In some, there is a complete disappearance of the uremic symptomatology. This is accompanied by an improvement in the sense of well-being of most patients. Many patients consider their lives "normal" apart from the burden of the diet. Transfusion and dialysis requirements decrease strikingly, and anemia tends to improve in some patients.

The regimen is not without problems. There are patients who will not accept the diet. Glomerular filtration rate does not improve or may continue to gradually decrease. Severe hyperkalemia and acidosis develop in many patients. A distressing bleeding tendency is a rather common complication.[6] The diet is of little or no benefit in patients with very low GFR (less than 5 ml. per minute), and it does not necessarily prolong life. Details of the low protein diet currently in use at the Miami Veterans Administration Hospital have been published in this Journal recently.[7]

Anemia.—Acute blood loss in patients with chronic renal disease should be adequately replaced. Beyond this, treatment of anemia with packed red cell transfusions should be prescribed only in those patients who have symptoms of anemia (angina, claudication, heart disease, severe weakness).[8] When transfusions are indicated, raising the hemoglobin level to about 10 Gm. per 100 ml. is generally sufficient for relief of symptoms. The employment of transfusion has to be carefully planned and executed, particularly in patients with a congested circulation or heart failure. Even a single unit of packed red cells has resulted in pulmonary edema in these patients. Unfortunately, the beneficial effects of transfusion are short-lived.

Cardiovascular Complications.—Peripheral edema and circulatory congestion occasionally represent a real therapeutic dilemma for the physician. Not infrequently sodium and water retention result from hypertensive or other intrinsic heart disease or from hypoproteinemia. However, on many occasions they are solely the result of ingestion of salt in excess of the limited excretory capacity of the diseased kidney. Dietary sodium restriction will then be the basis of treatment. Occasionally, the newer potent diuretics (ethacrynic acid or furosemide) are helpful. These agents are capable of inducing diuresis even in patients with GFR as low as 5 to 10 ml. per minute.[9]

If digitalis therapy is indicated, appropriate corrections in dosage should be applied to avoid digitalis intoxication. For example, with digoxin,

which is largely excreted by the kidney, renal failure results in reduced excretion and abnormally elevated plasma concentration of the glycoside. Therefore, in severe renal failure the maintenance dose of digoxin may require reduction to one half or one third the usual dose.[10] Occasional patients do not respond to these measures, and peritoneal or hemodialysis must be employed to remove the excess salt and water.

Hypertension.—Modest elevation of blood pressure does not require specific treatment in patients with chronic renal failure. Such hypertension is often a manifestation of severe sodium retention and can be controlled by adequate regulation of salt intake. However, more aggressive treatment is indicated in the presence of accelerated (malignant) hypertension, hypertensive encephalopathy, and frank heart failure secondary to hypertensive disease. Furthermore, severe hypertension may accelerate deterioration of renal function and may also require control. The selection of antihypertensive agents depends on the clinical experience of the physician, rapidity with which blood pressure must be reduced, and response of the patient. Regardless of the specific drugs selected, the hazards of therapy must be kept in mind. For example, cardiac output and renal blood flow may be transiently lowered by a reduction in blood pressure. This can lead to further deterioration in renal function. It should be emphasized that marked fluid retention makes most of these patients less responsive to any form of antihypertensive therapy. Therefore, salt restriction and potent diuretics are useful adjuvants.

Conclusion

Renewed interest in dietary therapy—a major part of the medical management—has introduced an important dimension in the overall treatment of the uremic patient. I should like to emphasize, however, that control of sodium intake remains the therapeutic key for most patients with chronic renal failure.

References

1. Bricker, N. S.; Klahr, S.; Lubowitz, H., and Rieselbach, R. E.: Renal Function in Chronic Renal Disease, Medicine 44:263-288 (July) 1965.
2. Bricker, N. S.: On the Meaning of the Intact Nephron Hypothesis, Editorial, Am. J. Med. 46:1-11 (Jan.) 1969.
3. Steinmetz, P. R. and Kiley, J. E.: Hyperkalemia in Renal Failure, J.A.M.A. 175:689-693 (Feb. 25) 1961.
4. Reiss, E.: Diet in Renal Disease. The Kidney, Vol. 1, No. 1, September, 1967. Published by National Kidney Foundation, New York, N. Y.
5. Giovanetti, S. and Maggiore, G.: A Low-Nitrogen Diet with Proteins of High Biological Value for Severe Chronic Uremia, Lancet 1:1000-1003 (May 9) 1964.
6. Lewis, E. J. and Magill, J. W., Editors: Conference on the Nutritional Aspects of Uremia, October, 1967, Scottsdale, Ariz., Am. J. Clin. Nutrition 21:349-643 (May-June) 1968.
7. Sugerman, D. L.; Hulet, W. H., and Samara, B. J.: Treatment of Uremic Syndrome with Giordano-Giovanetti Diet, J. Florida M. A. 55:535-539 (June) 1968.
8. Erslev, A. J.: The Anemia of Renal Failure, The Kidney. Vol. 1, No. 4, March, 1968. Published by National Kidney Foundation, New York, N. Y.
9. Maher, J. F. and Schreiner, G. E: Studies on Ethacrynic Acid in Patients with Refractory Edema, Ann. Int. Med. 62:15-29 (Jan.) 1965.
10. Doherty, J. E.; Perkins, W. H., and Wilson, M. D.: Studies with Tritiated Digoxin in Renal Failure, Am. J. Med. 37:536-544 (Oct.) 1964.

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Prevention of Renal Disease

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Michael Pickering, M.D. and George Spooner, M.D.

Although recent advances in treatment of renal disease, such as hemodialysis, transplantation of kidneys, use of immunosuppressives for treatment of glomerular diseases and more effective use of antibiotics in treating urinary tract infections, have been among the most exciting developments in medicine, insights into the pathogenesis of some renal diseases have been made which, though less dramatic than the breakthroughs listed, are, even so, exciting and give promise of new hope for the future. While almost continuous introduction of new and effective drugs in every field of medicine has greatly increased the ability of the physician to aid his patient, the drugs have introduced an entirely new panoply of iatrogenic diseases which with great frequency involve the kidneys.

This paper will discuss briefly several areas in which renal disease can be prevented or greatly modified by a careful, attentive physician.

Infections

Acute glomerulonephritis can be caused by infections due to organisms other than nephritogenic streptococci; streptococcus viridans of subacute bacterial endocarditis,[1] the virus of infectious hepatitis[2] or some viral sore throats[3] are all examples. The most common cause of acute glomerulonephritis, however, is infection by one of the three nephritogenic streptococci. Although most patients recover from acute poststreptococcal glomerulonephritis, it is now recognized that acute disease progresses into chronic destructive glomerulonephritis with some frequency.[4] The incidence of acute glomerulonephritis can be reduced if dissemination of nephritogenic streptococci throughout the community is halted. It is of interest that in the poor sections of Jacksonville many cases of acute glomerulonephritis result from skin infections due to Red Lake streptococcus. These lesions frequently appear as an indolent crusting infection and receive no attention. They, and the renal disease resulting from them, could be, in large measure, prevented by a good medical hygiene program. The available evidence also suggests that the individual with a nephritogenic streptococcus infection can be protected by prompt treatment with penicillin.[5] Not only should the patient be treated, but all his intimate associates should be examined to allow treatment of those who harbor hemolytic streptococci in their throats.

Dehydration

Throughout Florida there is a markedly increased incidence of renal stones during early summer.[6] The increase begins 10 to 12 weeks after advent of hot weather. The decrease in urine volume which occurs when one sweats excessively during vigorous exercise in warm weather causes a high concentration of all stone-forming constituents of urine and greatly increases the likelihood of precipitation of poorly soluble salts and, thus, stone formation. Education of patients so that dehydration is avoided during the first exuberant activity of summer could save many people not only the pain associated with passage of renal stones but also the renal damage, infection, or loss of a kidney which may occur as a result of obstruction. Patients with renal disease are unusually susceptible to volume depletion, a condition which frequently occurs during or immediately following major surgery. Acute renal failure following surgery frequently is due to volume depletion with resultant poor perfusion and could be prevented if care were taken to assure adequate volume expansion before surgery. Even acute

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renal failure due to mismatched blood transfusion is far more likely to occur in the volume depleted than in the normovolemic patient. Thus careful attention to preoperative hydration should prevent many instances of acute renal failure.

Drugs

During the past 15 years awareness of drug induced renal disease has gradually increased. Although the true incidence of drug nephrotoxicity is unknown, it is obviously increasing. The magnitude of the problem is illustrated by the fact that in the past eight years over 40 patients have been admitted to the Shands Teaching Hospital who had interstitial nephritis[7] due, apparently, to abuse of phenacetin-containing analgesics. Among these patients were two physicians whose renal disease was diagnosed when azotemia was found during a routine preoperative blood chemistry examination. The most effective way to control analgesic-abuse nephritis would be the requirement of a prescription for all phenacetin-containing compounds; better dissemination of information among physicians is obviously also needed.

Analgesic-abuse nephritis, however, is only a part of the overall problem of drug induced renal disease. During recent years several patients with an acquired Fanconi type of renal disease resulting from outdated or degraded tetracycline have been reported.[8] This danger is greater in Florida, perhaps, than in other states as heat and humidity both hasten degradation of tetracycline. Awareness by pharmacists of the danger of degraded tetracycline and strict attention to expiration date and appearance of the medication[8] could eliminate this cause of renal disease.

The danger of renal damage from drugs such as polymyxin B or kanamycin is well known. Less well appreciated is the potential nephrotoxicity of other widely used drugs. We have recently studied a patient whose disease was due to cephalothin, and currently have a young man on dialysis whose kidneys were destroyed by nephrocalcinosis induced by over-exuberant administration of vitamin D. During the past year we have treated an average of one patient each month for renal failure due to drug nephrotoxicity. The most common etiologic agents were bacteriocidal antibiotics, although in several instances the exact agent could not be identified as the patient received several drugs at the same time.

Obstructive nephropathy due to precipitation of sulfa drugs in the renal tubules led to the development of sulfisoxizole (Gantrisin®) and the introduction of triple sulfas. While sulfa crystal obstruction is now relatively infrequent, sulfisoxizole does precipitate in an acid urine, particularly if the patient is dehydrated. We have seen several patients with obstruction due to precipitation of sulfisoxizole in renal tubules.

The occurrence of retroperitoneal fibrosis with ureteral obstruction due to methysergide (Sansert®) is well known, but serves with the other examples to illustrate the point that potentially nephrotoxic drugs may occur in any class of compounds and may damage the kidney through many different mechanisms. Physicians must not only be aware of known nephrotoxic drugs and be thoroughly familiar with the limitations of their use, but also should expect to discover nephrotoxicity from any drug until long usage has proven it safe. Only when physicians develop a very real appreciation of the potential nephrotoxicity of the drugs they use will this alarming and increasingly common cause of renal disease be prevented.

Prevention

Although antibiotic treatment of pyelonephritis has improved in recent years, prevention of disease is a more satisfactory approach than treatment. During the past four years we have used a bladder care regimen and administration of $NaHCO_3$ with a high degree of success in preventing urinary tract infections. The high incidence of post-coital infections in young women suggests that contamination of the urethra and bladder occurs during intercourse. By having patients drink a glass of water before going to bed and voiding immediately after intercourse, we have sharply decreased the occurrence of bladder infections and the incidence of pyelonephritis which so frequently follow lower urinary tract infection.

Even more effective than bladder care for preventing recurrent urinary tract infection in the young women followed in our clinic has been administration of $NaHCO_3$* in amounts sufficient to produce an alkaline urine. The incidence of infection in our study group of 30 patients who received antibiotics for each infection was four per year. In 30 women treated in the same fashion during the first year of the study, the incidence of infection was also four per year; during the second year of the study when these women were treated with daily $NaHCO_3$ ingestion, only two women had a single infection, an incidence of 0.07%, while the

* Usually 1.8 Gm. three or four times each day

antibiotic-treated control group continued to have infections at a rate of four per year.

Little attention has been given by physicians to prevention of renal disease. While a lack of information as to causes of disease makes prophylaxis difficult, it is obvious that at present there are many areas in which activity by physicians could prevent renal disease.

References

1. Christian, H. A.: The Kidneys in Subacute Streptococcus Viridans Endocarditis, J. Mt. Sinai Hosp. 8:427-440 (Jan.-Feb.) 1942.
2. Conrad, M. E.; Schwartz, F. D., and Young, A. A.: Infectious Hepatitis: A Generalized Disease, Am. J. Med. 37:789-801, 1964.
3. Bates, R. C.; Jennings, R. B., and Earle, D. P.: Acute Nephritis Unrelated to Group A Hemolytic Streptococcus Infection; Report of Ten Cases, Am. J. Med., 23:510-528, 1957.
4. Jennings, R. B. and Earle, D. P.: Post-streptococcal Glomerulonephritis: Histopathologic and Clinical Studies of the Acute, Subsiding Acute, and Early Chronic Latent Phases, J. Clin. Invest. 40:1525-1595 (Aug.) 1961.
5. Stetson, C. A.; Rammelkamp, C. H.; Kraus, R. M.; Kohen, R. J., and Perry, W. D.: Epidemic Acute Nephritis: Studies on Etiology, Natural History, and Prevention, Medicine 34:431-450 (Dec.) 1955.
6. Personal Communication: Dr. George R. Miller, Department of Urology, University of Florida College of Medicine, Gainesville.
7. Gault, M. H.; Rudwal, T. C.; Engles, W. D., and Dossetor, J. B.: Syndrome Associated with the Abuse of Analgesics, Ann. Int. Med. 68:906-925 (Apr.) 1968.
8. Cleveland, W. W.; Adams, W. C.; Mann, J. B., et al,: Acquired Fanconi Syndrome Following Degraded Tetracycline, J. Pediat. 66:333-342 (Feb.) 1965.

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Environment and Renal Disease

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Man is becoming increasingly exposed to a wide variety of chemical agents utilized in industry, agriculture and medicine. Many of these agents are specifically or potentially nephrotoxic and may produce changes ranging from simple proteinuria to irreversible renal failure. The kidneys are particularly liable to damage from drugs or poisons since, although they comprise together about 0.4% of the body weight, they receive 25% of the cardiac output and are thereby rapidly exposed to large quantities of chemicals in the plasma. In addition, substances excreted by the kidney tend to become concentrated in renal tissue either during tubular secretion or by virtue of the hypertonicity of the renal medulla, or both.

In a recent comprehensive review, Schreiner and Maher[1] have divided over 60 agents into 10 groups according to their structural similarity or use. It is not within the scope of this essay to delve deeply into each of these substances, and I would refer the reader to the excellent expositions of toxic nephropathy presented by Milne[2] and Emmerson,[3] as well as to the first review mentioned.

Toxic nephropathy may be either acute or chronic and may affect glomerular or tubular function or cause diffuse renal damage with oliguria or anuria. In their survey of 99 cases of toxic nephropathy, Schreiner and Maher reported most were due to heavy metals (22 cases) and organic solvents (25 cases) with carbon tetrachloride accounting for 84% of the latter group. Other toxic substances are antibiotics and diagnostic agents.

Organic Solvents

Carbon tetrachloride poisoning is the most common clinical problem in this category since it is widely used as a cleaning agent, an industrial solvent and as a constituent in some fire extinguishers. It is quite volatile, and absorption, enhanced by alcohol, occurs rapidly through the lungs, skin and small intestine. Carbon tetrachloride can be oxidized to phosgene which, in the absence of ethanol, will condense with ammonia to form urea. However, phosgene can condense with ethanol to form ethylchloroformate, a potentially more toxic substance, thereby providing an alternative explanation for the marked enhancement of toxicity known to occur in the presence of even small amounts of alcohol.[4]

The clinical picture varies but is usually characterized by gastrointestinal symptoms, toxic hepatitis and hepatic failure and toxic nephritis with hematuria and oliguria. Therapy is primarily supportive with the usual procedures for hepatic and renal failure.

Tetrachlorethylene and chloroform are uncommon causes of renal problems, although hepatic necrosis is a significant complication.

Antibiotics

Streptomycin, vancomycin, kanamycin and neomycin have all been reported to be variably ototoxic and nephrotoxic, although the more recently available, less impure, lots of vancomycin have little, if any, nephrotoxicity.[1] Neomycin is the most nephrotoxic and should be used parenterally only under the most exceptional circumstances. Even though it is poorly absorbed from the gut, it should be used with caution in the presence of chronic renal failure. Kanamycin use should regularly be followed by frequent determinations of blood urea nitrogen (BUN) and urinalyses. Although acute tubular necrosis may occur, the renal lesions are usually rapidly reversible on discontinuance of the drug.

Colistin, the most widely used of the polymyxin class of drugs, is well known to be nephrotoxic, and, although acute tubular necrosis may occur, recovery is the rule if therapy is discontinued early.

The tetracyclines are not specifically nephrotoxic, but can produce a reversible Fanconi syn-

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drome if spontaneous degradation of the drug occurs during storage.[5] In addition, Bateman, et al,[6] reported that large doses of oxytetracycline produced increased azotemia in the presence of pre-existing renal disease; this was later ascribed, however, to an antianabolic effect of tetracyclines in general rather than to a specific nephrotoxic effect.[7]

Amphotericin B is almost uniformly nephrotoxic, and its use is associated with cast formation, hematuria, proteinuria, azotemia, tubular necrosis and, in some instances, renal tubular acidosis.[8]

Diagnostic Agents

Although the highest incidence of nephrotoxicity is associated with the use of bunamiodyl (Orabilix®) for oral cholecystography,[1] evidence of disturbed renal function is not uncommon following abdominal aortography with other organic iodides such as sodium acetrizoate (Urokon®), sodium iodomethanate (Neoiopax®) and idopyracet compound (Dicdrast®). Intravenous pyelography is less likely to induce problems, even in the presence of pre-existing renal insufficiency, although there may be a specific nephrotoxicity that occurs with myeloma kidney.

Metals

All of the heavy metals are capable of producing variable degrees and types of acute and chronic nephropathies as well as the nephrotic syndrome. Mercury and lead intoxication are the most common problems encountered, although cadmium, gold, uranium, copper, bismuth, thallium, and arsenic have all been incriminated.[3]

Mercury may be absorbed through the skin, mucous membranes or alimentary tract, or by inhalation of vapor. Acute mercury intoxication, most often due to bichloride of mercury, is usually characterized by severe gastrointestinal symptoms with ulcerative stomatitis and gastroenterocolitis, peripheral vascular collapse and oliguria. Acute tubular necrosis may occur following the excessive use of mercurial diuretics, especially in the presence of already impaired renal function.

Acute ingestion is a medical emergency since renal lesions develop within three hours.[1] Gastric lavage with egg white or concentrated albumin and medicinal charcoal is useful. British Anti-Lewisite (BAL) 3.0 mg. per kg. of body weight, should be given every four hours, up to six injections. However, BAL itself is toxic and should be used with caution. The BAL-Hg. complex is dialyzable, and hemodialysis should be utilized.

Acute lead intoxication is now less common with the decreasing use of lead-based paints, but is still seen as an occupational disease in welders and in persons drinking bootleg alcohol. In colder climates, lead intoxication is seen as the result of inhalation of fumes from the burning of storage batteries. Clinically, the manifestations may be dramatic with abdominal colic, peripheral neuritis and optic neuritis. The characteristic renal lesion is the Fanconi syndrome. Calcium versenate will increase the excretion of lead, although it may be nephrotoxic and has been implicated in some fatal nephropathies and the nephrotic syndrome.

Of interest in chronic lead nephropathy is the occurrence of gout in over 50% of such patients. This entire subject has been recently reviewed by Emmerson.[3]

Although the effects of acute and chronic cadmium intoxication, usually the result of industrial exposure,* are well documented,[3] the recently uncovered role of renal cadmium accumulation in the production of hypertension is particularly exciting.[9] Actually, the renal molar cadmium-to-zinc ratio seems to be the critical factor. Both experimentally and in autopsy series, a ratio above 0.45 is regularly associated with hypertension. In rats, a cadmium chelating agent has been shown to reverse cadmium-related hypertension.[9]

Radiation nephritis is usually iatrogenic, the result of radiation therapy for intra-abdominal neoplasms. The kidney is the most radiosensitive of the major organs[1] and such injury is characterized by proteinuria, hypertension, anemia, cardiomegaly, congestive heart failure and chronic uremia. The mortality rate is 50% in acute cases with a marked tendency to develop malignant hypertension in the survivors.

Finally, continuing exposure to a variety of pesticides such as organophosphates, chlorinated hydrocarbons and carbamates, all of which can be absorbed via the lungs, skin and alimentary tract, has been shown to produce a sub-clinical impairment of renal tubular function, ranging from simple phosphaturia to multiple dysfunction with aminoaciduria, proteinuria, glycosuria, failure to concentrate and defects in acidification.[10]

Undoubtedly, man will continue to develop an increasing variety of noxious humors and vapors which, whatever beneficial purpose they may serve, will also succeed in poisoning both man and his environment.

* Cadmium is soluble in acid, and corrosive food, such as lemon juice, and cadmium-plated food containers may provide a source of chronic exposure.

References

1. Schreiner, G. E. and Maher, J. F.: Toxic Nephropathy, Am. J. Med., 38:409-449 (Mar.) 1965.
2. Milner, M. D.: Drugs, Poisons and the Kidney *in* Black, D. A. K. 2nd ed. Renal Disease. Philadelphia, F. A. Davis Co., pp. 546-560, 1967.
3. Emmerson, B. T.: Metals and the Kidney, Ibid. pp. 561-593.
4. Guild, W. R.; Young, J. V., and Merrill, J. P.: Anuria Due to Carbon Tetrachloride Intoxication, Ann. Int. Med. 48:1221-1227, 1958.
5. Cleveland, W. W.; Adams, W. C.; Mann, J. B., et al: Acquired Fanconi Syndrome Following Degraded Tetracycline, J. Pediat. 66:333-342, 1965.
6. Bateman, J. C.; Barberio, J. R.; Grice, P., et al: Fatal Complications of Intensive Antibiotic Therapy in Patients with Neoplastic Disease, Arch. Int. Med. 90:763-773 (Dec.) 1952.
7. Shils, M. E.: Some Metabolic Aspects of Tetacyclines. Clin. Pharmacol. Ther. 3:321-339 (May-June) 1962.
8. Douglas, J. B. and Healy, J. K.: Nephrotoxic Effects of Amphotericin B, Including Renal Tubular Acidosis, Am. J. Med. 46:154 (Jan.) 1969.
9. Schroeder, H. A.: Cadmium, Chromium and Cardiovascular Disease, Cir. 35:570-582 (Mar.) 1967.
10. Mann, J. B.; Davies, J. E., and Shane, R. W.: Chronic Pesticide Exposure and Renal Tubular Dysfunction, Clin. Res. 14:155, 1966.

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Hemodialysis and Homotransplantation in Advanced Renal Failure

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When a patient's kidney function is impaired to the extent that his sense of well-being and ability to perform his usual activities are jeopardized, his physician needs the answers to several important questions. He must know whether there are elements in his patient's renal insufficiency which, if corrected, would reverse or halt the progress of renal failure. If such factors are not present, he must choose among the types of therapy presently available for patients with end-stage renal disease; namely, palliative medical and dietary therapy, maintenance hemodialysis, and renal transplantation. The interrelationships of these are shown diagramatically in Figure 1. The physician needs to know the effectiveness, indications, complications, availability and costs of each form of therapy. The answers to some of the foregoing questions are provided by other authors of this symposium, and dietary therapy is described in a recent paper by Sugerman, Hulet and Samara.[1] However, these questions are raised here because it is of the utmost importance that these forms of therapy not be initiated prematurely since they are unpleasant at best and, in some respects, hazardous. Excessive delay, on the other hand, may render any form of treatment ineffective.

Our discussion will be limited to maintenance hemodialysis and renal homotransplantation—very different, yet complementary means of therapy. In conjunction with careful dietary and medical management, either program of treatment can alleviate uremia, congestive heart failure, and hypertension. Nutrition can be improved, leading to increased stamina and resumption of nearly normal activities.

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Hemodialysis

Life expectancy.—Realistically, both forms of therapy must be considered limited with regard to long-term survival. A report[2] on 302 patients in 14 centers supported by the U.S. Public Health Service shows the following rates of survival after initiation of hemodialysis therapy: 87% survive one year, 77.3% two years, and 67.4% three years. The calculated survival rate for seven years is 57.8%. Causes of death include atherosclerotic and hypertensive cardiovascular disease, infections, hemorrhage, hepatitis and, rarely, dialysis accidents. However, the remarkable experience of Scribner and his colleagues in Seattle demonstrates that dialysis therapy can be conducted successfully for at least nine years in individual patients.[3]

Adequacy.—To be effective, dialysis must be performed with sufficient frequency and duration. This usually means two to three dialyses weekly of nine to 12 hours each using the Kiil dialyzer (Fig. 2) or two to three dialyses weekly of six to eight hours each using the Kolff dialyzer (Fig. 3). (Not shown in the figures are pieces of equipment which circulate and monitor the dialyzing solutions.) Inadequate dialysis is marked by persistence of uremic symptoms, poor nutrition, advancing peripheral neuropathy, water retention, hypertension, heart failure or pericarditis.

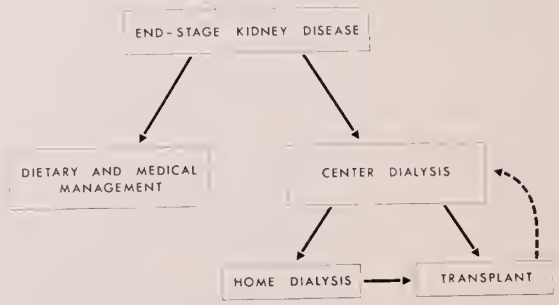


Fig. 1.—Interrelation of therapeutic programs for advanced renal failure.

Persisting problems.—In spite of adequate dialysis certain problems often remain. The anemia which usually persists is probably related to the absence of renal production of erythropoietin and to repeated small losses of blood into the dialyzer and the technician's syringe. Bone disease may arise from a combination of vitamin D resistance, poor intestinal absorption of calcium, secondary hyperparathyroidism, and chronic acidosis. Not surprisingly, emotional disturbances may occur as the result of decreased earning capacity, dependence upon an artificial organ for existence, and anxiety about medical problems. Because of irreversible myocardial insufficiency related to long standing hypertension, coronary artery or valvular disease, heart failure persists in a few patients despite adequate dialysis. Viral hepatitis is a disturbingly common problem among patients and dialysis center personnel. Headaches and postural hypotension are frequently related to dialysis itself, and in menstruating females serious menorrhagia may occur because of heparinization during dialysis.

The most commonly occurring complications are those related to the arterial and venous cannulas. Although they are constructed of silicone rubber and Teflon,® non-wettable plastics to which there is little or no tissue reactivity, clotting often occurs within the cannulas, and the openings created by their exit through the skin are frequent avenues of infection.

Transplantation

Survival Rates.—Long-term success of transplantation is also limited in most cases. At the present time transplanting a kidney should probably be viewed as a means of substituting a milder, more slowly progressive form of renal disease (tissue rejection) for end-stage renal disease. The most recent results from the Kidney Transplant Registry are summarized by Russell,[4] and an abstract of these data is presented in the table. Figures are tabulated according to the source of the donated organ. They indicate that of identical twins who survived at least six months, 80% are still living. Failures in this group are usually due to recurrence of the original disease in the grafted organ. Of transplants between siblings, 50% of the organs function for four years or longer. The results are somewhat less favorable when parents' kidneys are donated to their children. The data show a still poorer prognosis for organs of cadaveric origin. It should be noted, however, that these

PERCENT SURVIVAL OF TRANSPLANTED KIDNEYS

DONOR GROUP	DURATION OF GRAFT SURVIVAL*				
	6 MONTHS	1 YEAR	2 YEARS	3 YEARS	4 YEARS
IDENTICAL TWINS	80	80	80	80	80
SIBLINGS	67	60	55	53	50
PARENTS	60	55	48	40	20
CADAVER	30	26	20	15	15

*APPROXIMATE RATES OF GRAFT SURVIVAL FOR GIVEN DURATION FIGURES BASED ON ALL PATIENTS REPORTED TO KIDNEY TRANSPLANT REGISTRY

Table 1

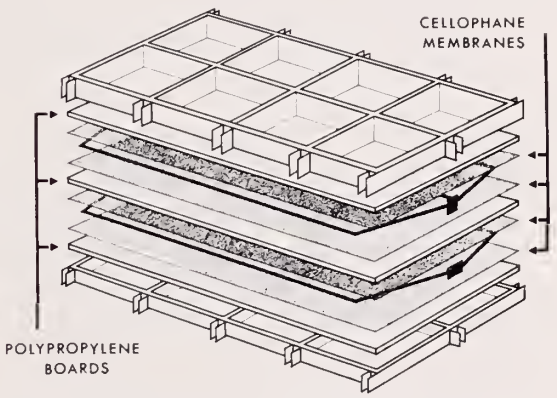


Fig. 2. — Kiil dialyzer: a parallel flow, low resistance, low volume dialyzer not requiring a blood pump.



Fig. 3. — Kolff dialyzer: a twin coil dialyzer of excellent efficiency but high resistance requiring use of a blood pump.

figures are a compilation of all kidney transplants performed in the past 10 years, a total of about 1,200. They include results of some of the early attempts to suppress organ rejection by submitting patients to total body irradiation, therapy which in itself is attended by a high rate of mortality.

Improving Results.—In more recent years experience and refinement of the use of immunosuppressive agents, especially azathioprine (Imuran®) and prednisone, have led to improved results. Starzl and his group in Denver now obtain survival of 90% of grafted kidneys for at least one year when the organs are from related donors. Kincaid-Smith[5] in Australia recently reported that 65% of grafted cadaveric kidneys functioned for at least one year and that patient survival rate after one year was 70%. Administration of anti-human lymphocyte globulin prepared from horse serum may prove to enhance graft survival further. Still more improvement in results may be seen in the near future through the use of tissue typing of prospective donors and recipients in conjunction with the establishment of a nationwide system whereby patients and well-matched organs will be brought together.

Complications.—Some patients whose grafted kidneys are rejected can be maintained by dialysis until another opportunity for transplantation is presented. Other patients die in spite of adequate renal function. These deaths are most often due to infections related to surgical complications or to suppressed resistance to bacteria, fungi or protozoa. The large doses of adrenocortical steroids sometimes required to suppress tissue rejection may lead to hypertension, cardiac failure, gastrointestinal hemorrhage, or reactivation of tuberculosis.

Selection of Patients

This, in brief, is an account of what hemodialysis and renal transplantation can and cannot accomplish. Which patients, then, are suitable for these types of treatments? The answers to this question are affected by costs and availability of each and by limitations and stresses they impose upon patients and their families. These realities of life mean that not every patient with end-stage kidney disease will realize sufficient benefit from these therapeutic programs to warrant their application; it is, therefore, necessary to consider many factors in a given patient's case. Unfavorable factors include advanced age; the presence of serious vascular disease, whether cardiac, cerebral or peripheral; the presence of systemic diseases such as diabetes mellitus, lupus erythematosus, or carcinoma; psychiatric disease; alcoholism; lack of ability or motivation to follow a fairly rigid therapeutic program; and family instability. In general, younger patients (less than 15 years old) are more suitable for transplantation than for hemodialysis, and transplants have been successful in patients as young as three years of age. At the other end of the age scale, complications of transplantation occur so frequently that patients beyond 50 years of age usually are not considered acceptable risks. Older patients may fare reasonably well on maintenance dialysis, but the frequent occurrence of vascular and other diseases makes most centers reluctant to accept patients beyond the age of 55 years. Patients with lower urinary tract malformations and resistant infections are unsuitable for kidney grafting but may be quite acceptable for long-term dialysis. On the other hand, some of the rigid criteria which apply to selecting patients for hemodialysis, such as those relating to emotional stability and willingness to adhere to a medical regimen, need not be as strictly applied when considering patients for transplantation.

Selection of Kidney Donors

The evaluation of a prospective kidney donor is at least as important as that of the patient. Most centers require that donor and recipient blood groups be compatible. The donor must have nothing in his past history to suggest renal or urinary tract disease, and he must be free of disease which might affect renal function at a later time. The urinalysis, creatinine clearance, excretory urogram, and urine culture must be normal. The final step in evaluation is renal arteriography, but before this is performed, careful assessment must be made of the willingness of the prospective donor to give up a kidney. If this willingness is not present, and the individual is acting only because of pressure from other family members, the physician is obligated to provide a plausible medical reason for discontinuing the investigation.

When the kidney is taken from a cadaver, complete evaluation is not possible and is usually limited to assessment of such historical information as may be available, examination of the urine obtained from the bladder, and inspection of the kidney at the time of its removal.

Financial Aspects

The costs of therapy must be clearly defined and long-range means must be definitely available before any commitment is made or undue hopes are aroused regarding dialysis or transplantation. Financial resources may be personal reserves, health insurance, or various governmental agencies. The costs of hospitalization, physicians' fees, and dialysis performed in a center are *at least* $10,000 a year. These costs can be reduced by training patients to conduct dialysis at home. Two to three months are usually required for training, and this, along with equipment, supplies and treatment for the remainder of the first year, costs *at least* $10,000. Thereafter, the costs are *a minimum* of $3,000 annually exclusive of physicians' fees. The costs involved in renal transplantation are also extremely high because of the preoperative and postoperative intensive care, dialyses, and numerous laboratory studies which are often necessary. Expenditures of this magnitude would lead to financial ruin for many families, and thoughtful consideration must be given to this fact. Nevertheless, it is our belief that repetitive dialysis should be initiated or renal transplantation should be planned when a patient's symptoms are the result of truly irreversible renal failure and are of sufficient severity to interfere with his most important activities such as earning a living, acquiring an education, or making a home, and when all clinical, emotional, and economic factors have been considered and deemed favorable.

Outlook for the Future

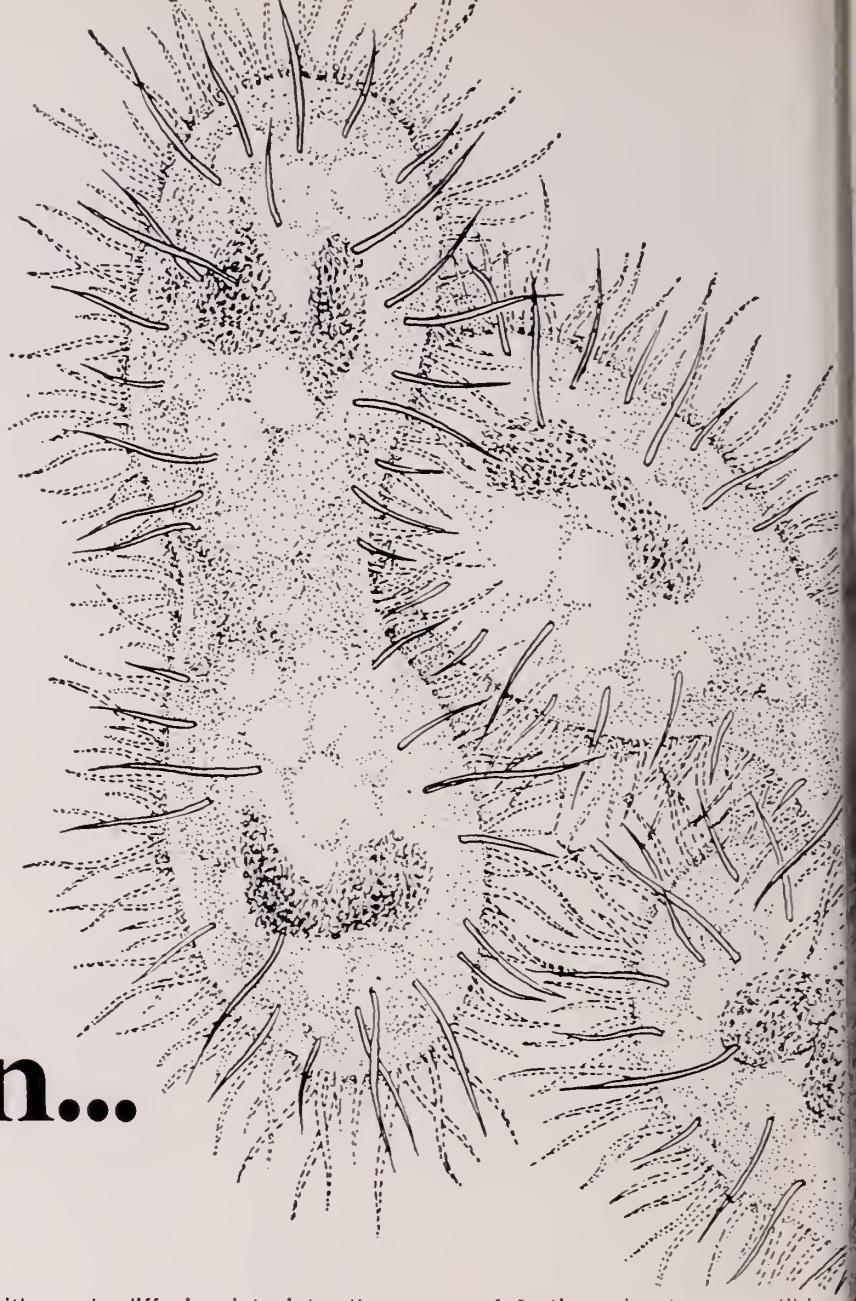
Present and future research activities will undoubtedly lead to increased availability and effectiveness of treatment. Reduction in costs can be realized by the trend toward conducting dialysis in the home by development of simpler, less expensive equipment and supplies, and by employment of more economical techniques, such as the recently described reuse of coil dialyzers and blood tubing.[6]

A committee under the chairmanship of Dr. Carl Gottschalk[7] has carried out an exhaustive study of many aspects of dialysis and transplantation, particularly those related to the economic problems. They conclude that the wisest expenditure of research efforts would be toward solving the problems of organ preservation and storage and tissue typing. In a letter published in the report, Dr. Belding Scribner states, "Even modest further improvements in techniques and results should make these treatments potentially available to all who can benefit from them, thereby saving the lives of several thousand patients each year." The heart of Richard Bright would be cheered to know that this may be just over the horizon.

References

1. Sugerman, D. L.; Hulet, W. H., and Samara, B. S.: Treatment of Uremic Syndrome with the Giordano-Giovannetti Diet, J. Florida M.A. 55:535-539 (June) 1968.
2. Lewis, E. L.; Foster, D. M.; de la Puente, J., and Scurlock, C.: Survival Data for Patients Undergoing Chronic Intermittent Hemodialysis, Ann. Int. Med. 70:311-315 (Feb.) 1969.
3. Hyatt, J.: The Wall Street Journal 173:1 (Mar. 10) 1969.
4. Russell, P. S.: Kidney Transplantation, Am. J. Med. 44:776-785 (May) 1968.
5. Marshall, V.; Kincaid-Smith, P.; Morris, P. J.; Saker, B., Eremin, J.: Cadaveric Renal Transplantation, Lancet 2:927-929 (Nov. 2) 1968.
6. Johnson, C. E.; Octaviano, G. N.; Beirne, G. J.; Haynie, G. D., and Burns, R. O.: Cleaning, Storage, and Repeated Use of Twin Coil Dialyzing Units, J.A.M.A. 207:2087-2088 (Mar. 17) 1969.
7. Report of the Committee on Chronic Kidney Disease, Government Printing Office 933-491 (Sept.) 1967.

▸ Dr. Richardson, P.O. Box 875, Biscayne Annex, Miami 33152.



A high index of suspicion... E. coli

How high is the "index of suspicion" for *E. coli* in urinary tract infections?

Recently it has been estimated that about 86 per cent of positive cultures in first attacks of urinary tract infection are *E. coli*.[1] It has also been noted that "The coliform group, especially *E. coli*, accounts for approximately 90 per cent of initial infections...."[2]

Consider wide-spectrum Gantanol® (sulfamethoxazole) for its high "index of confidence"—its proven effectiveness against *E. coli* and other sensitive gram-negative and gram-positive organisms. Therapeutic levels of Gantanol in blood and urine are achieved within 2 hours after a 2-Gm starting dose, with ready diffusion into interstitial fluids. Responsive infections generally clear within 5 to 7 days, with relief of symptoms usually seen within 24-48 hours.

Gantanol also earns its high "index of confidence" because Gantanol therapy is relatively free from complications, including the problem of bacterial resistance or superinfection.

Convenient, economical dosage schedule: *b.i.d.*

References: 1. Vernier, R. L., in Patient Care Feature: *Patient Care, 1*:20 (Feb.) 1967. **2.** Beeson, P. B.: "The Infectious Diseases," in Beeson, P. B., and McDermott, W. (eds.): *Cecil-Loeb Textbook of Medicine*, ed. 12, Philadelphia, W. B. Saunders Company, 1967, p. 230.

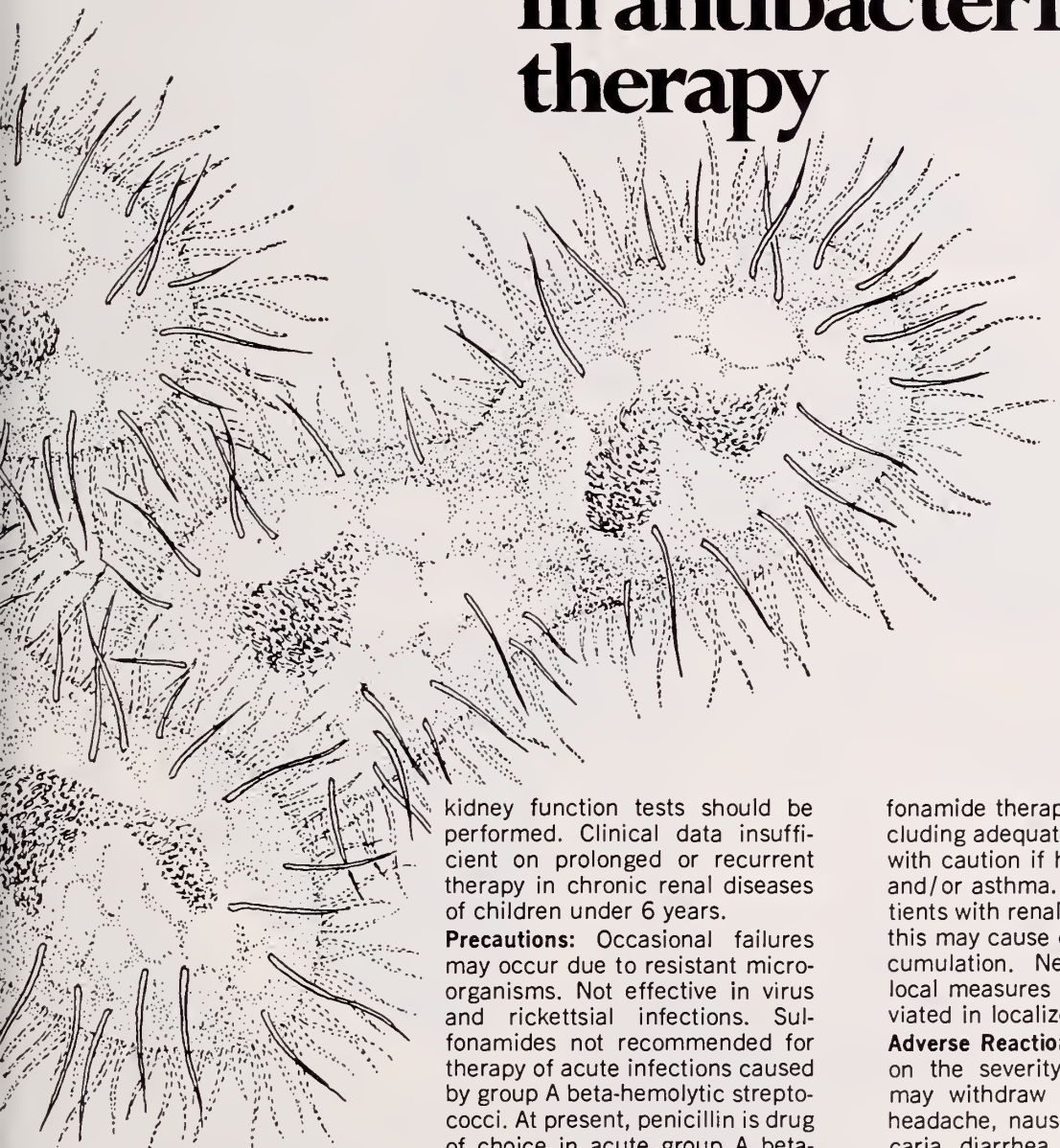
Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute and chronic urinary tract, respiratory and soft tissue infections due to susceptible microorganisms; prophylactically following diagnostic instrumental procedures on genitourinary tract.

Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, or newborn infants during first 3 months of life.

Warnings: Use only after critical appraisal in patients with liver or renal damage, urinary obstruction or blood dyscrasias. Deaths reported from hypersensitivity reactions, Stevens-Johnson syndrome, agranulocytosis, aplastic anemia and other blood dyscrasias. In closely intermittent or prolonged therapy, blood counts and liver and

For a high index of confidence... Gantanol® (sulfamethoxazole) in antibacterial therapy



Artist's rendition of E. coli. As with most strains of E. coli, these have flagella and are motile.

kidney function tests should be performed. Clinical data insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Precautions: Occasional failures may occur due to resistant microorganisms. Not effective in virus and rickettsial infections. Sulfonamides not recommended for therapy of acute infections caused by group A beta-hemolytic streptococci. At present, penicillin is drug of choice in acute group A beta-hemolytic streptococcal infections; although Gantanol has produced favorable bacteriologic conversion rates in this infection, data insufficient on long-term follow-up studies as to its effect on sequelae of rheumatic fever or acute glomerulonephritis. If other treatment cannot be used and Gantanol is employed in such infections, *important that therapy be continued in usual recommended dosage for at least 10 days*. Observe usual sulfonamide therapy precautions, including adequate fluid intake. Use with caution if history of allergies and/or asthma. Follow closely patients with renal impairment since this may cause excessive drug accumulation. Need for indicated local measures or surgery not obviated in localized infections.

Adverse Reactions: Depending upon the severity of the reaction, may withdraw drug in event of headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, Stevens-Johnson syndrome, skin rash, injection of the conjunctiva and sclera, petechiae, purpura, hematuria and crystalluria.

ROCHE

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so light-
headed..."

She's confused...and frightened. Yesterday, her complaint was a brief spell of dizziness. Next week, she may be troubled by prolonged nausea or tinnitus. The symptom of vertigo is a constant problem in geriatrics, and regardless of origin, duration, and frequency, such episodes can result in severe emotional and physical discomfort for the aging patient.

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(MECLIZINE HCl)

protects most patients against nausea and vertigo up to 24 hours with a single dose.

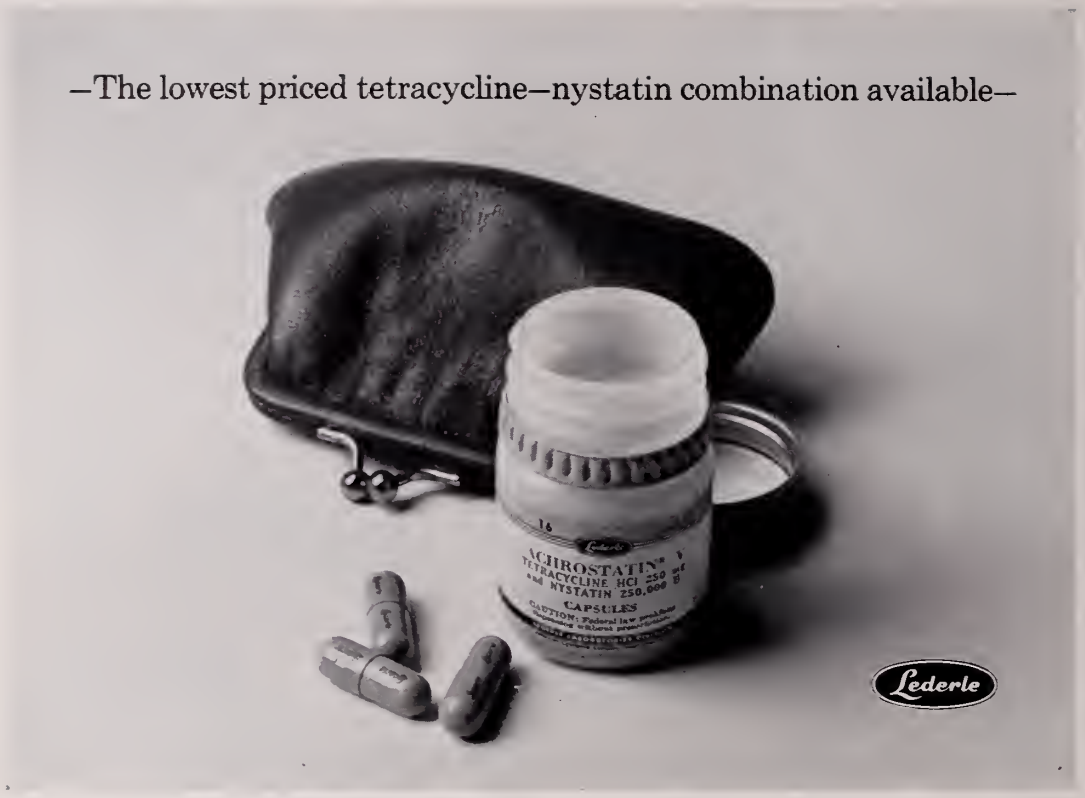
Whether the symptoms are due to Ménière's syndrome, labyrinthitis, vestibular dysfunction, or cerebral arteriosclerosis, most patients with nausea and vertigo respond remarkably well to Bonine (meclizine HCl). A single dose usually protects up to 24 hours. In difficult cases multiple daily doses may be necessary for maximum response.

One-a-day dosage costs your patients less. And fruit-flavored Bonine chewable tablets are more convenient to take anytime, anywhere—without water. Side effects are infrequent and mild, even with prolonged use.

Precautions: Although the incidence of drowsiness and atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. *Use in women of childbearing age:* In weighing potential benefits vs. risk in women of childbearing age, consider the fact that a review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum.
Supply: 25 mg. scored tablets.
More detailed professional information available on request.

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Both male and female patients are accepted and departmentalized care is provided according to sex and the degree of illness.

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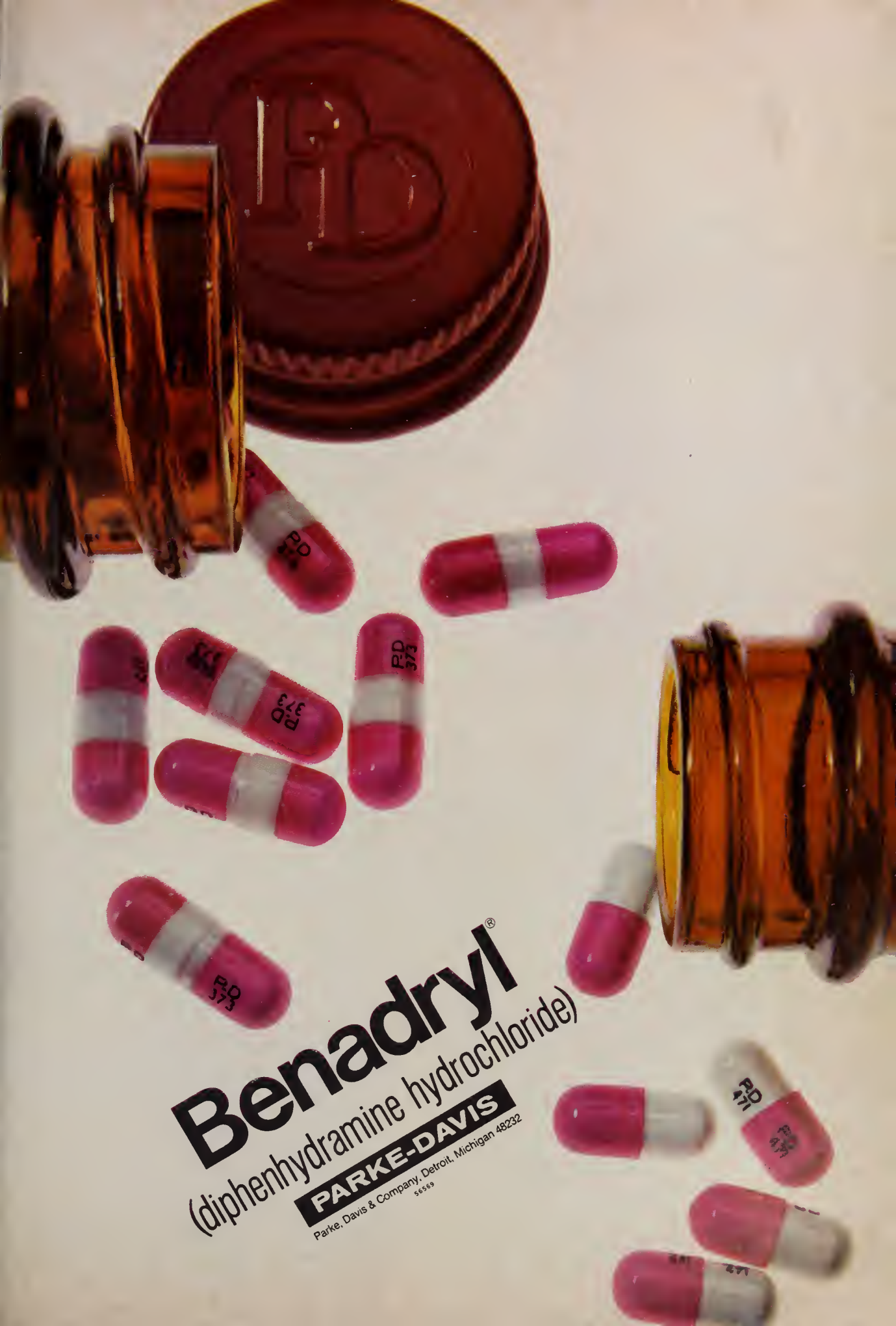


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The trouble with women...



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Cures Trichomonal Infection in Both

Although *Trichomonas vaginalis* infection occurs in only 5 to 10 per cent* of men, careful diagnosis will demonstrate the condition in about half of all husbands of infected women. Nine investigators* reported an average incidence of 50.8 per cent in exposed consorts.

Many clinicians have achieved a high degree of success in treating trichomonal vaginitis only after they have recognized the importance of sexual partners in perpetuating the infection. Crowley* has asserted, "it was not until we acted on this key premise that we were able to obtain positive and lasting results in our management of recurrent vaginal trichomoniasis."

Simple ten-day oral treatment with Flagyl virtually assures elimination of established trichomonal infection in men. In twenty-two of twenty-seven studies* data on the results of treating male patients revealed that all men treated with Flagyl were cured.

Indications: Flagyl is indicated in the treatment of trichomoniasis in both men and women.

Contraindications: Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasia.

Precaution: Complete blood cell counts should be made before, during and after therapy, especially if a second course is necessary.

Side Effects: Infrequent and minor side effects include nausea, metallic taste and furry tongue. Gastrointestinal disturbances, flushing and headache sometimes occur, especially with concomitant ingestion of alcohol. The taste of alcoholic beverages may be altered. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness or paresthesia of an extremity, joint pains, confusion, irritability, weakness, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

Dosage and Administration: *In women:* one 250-mg. oral tablet three times daily for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When used, one vaginal insert should be placed high in the vaginal vault each day for ten days; concurrently two oral tablets should be taken daily.

In men: When trichomonads are demonstrated, one 250-mg. oral tablet twice daily for ten days in conjunction with treatment of his female partner.

Dosage Forms: Oral tablets—250 mg.
Vaginal inserts—500 mg.

*Complete list of references on request.

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Research in the Service of Medicine



...now fast relief of hay fever symptoms with

NTZ®

Nasal Spray

When pollens fly, just one or two squirts of NTz in each nostril, followed in a few minutes by a second spraying, shrink swollen nasal passages almost on contact. And breathing comfort follows. The antihistamine component of NTz helps combat the allergic reaction and lessen rhinorrhea, sneezing and itching; its antiseptic wetting agent promotes rapid spread of components.

NTz Nasal Spray affords the well-known benefits of Neo-Synephrine® in a carefully balanced formula which includes:



Neo-Synephrine® (brand of phenylephrine) HCl, 0.5% (adult strength), decongestant
Thenfadil® (brand of thenyldiamine) HCl, 0.1%, antihistamine
Zephiran® (brand of benzalkonium as chloride, refined) Cl, 1:5000, antiseptic wetting agent

Treatments with NTz should be repeated every three or four hours as needed. NTz is for temporary relief of nasal symptoms and overdosage should be avoided. Available in squeeze bottles of 20 ml. and 1 oz. bottles with dropper.

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a broad-spectrum antibiotic for the diabetic:

threat or therapy?



Disordered metabolism makes her prone to bacterial infection —and to moniliasis.

When she needs tetracycline, she may also need protection against the threat of fungal overgrowth. And Tetrex-F can provide both.

Each capsule contains 250 mg. of tetracycline phosphate complex to control sensitive bacterial pathogens...and nystatin, 250,000 units, as a precautionary measure against troublesome vaginitis, proctitis or other monilial infections. However, superinfection with other, nonsusceptible organisms may occur.

Tetrex-F®
(tetracycline phosphate complex-nystatin)

PRESCRIBING INFORMATION: Tet-F. 5—2/23/67. For complete information consult Official Package Circular.
Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections.
Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.
For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

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Also available as Estomul Tablets:

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide-magnesium carbonate (as co-precipitate), 500 mg.

Indications: Peptic ulcer: duodenal, marginal, gastric, esophageal; gastroesophageal reflux; esophagitis (without stricture); irritable bowel syndrome; hyperacidity and dyspepsia; congenital shortening of esophagus with esophagitis; heartburn; spasm of the cardiac end of esophagus; gastritis; symptomatic hiatus hernia; alcoholic gastritis; functional pylorospasm.

Contraindications: Because of the anticholinergic action of orphenadrine, Estomul should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia (megaesophagus), and myasthenia gravis.

Precautions: Doses in excess of six tablets or six tablespoons of liquid daily may produce minor side actions such as dryness of the mouth or blurred vision.

Warning: Use of any drug in pregnancy, lactation or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother and child. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Side Effects: Possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Dosage: For adults: One or two tablespoons of liquid or one or two swallow tablets three times daily; depending on severity.

Availability: On Rx only. 12 oz. bottles of liquid and bottles of 100 swallow tablets.

anticholinergic
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Estomul®
Liquid

Each tablespoon (15 cc.) contains:
orphenadrine HCl, 25 mg.;
bismuth aluminate, 50 mg.;
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(as co-precipitate), 918 mg.

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Henry J. Babers Jr.

Albert J. Menendez



Henry J. Babers Jr., M.D. became President of the Florida Medical Association at the 95th Annual Meeting, May 18, 1969.

Dr. Babers is presently a practicing surgeon in Gainesville. Born May 11, 1912, in Gainesville, Florida, he attended local schools and graduated from the University of Florida in 1932. He received the Doctor of Medicine degree from Cornell University Medical College in New York City in 1936. After serving an internship at New York Hospital and residencies at New York Hospital, New York City, and Cumberland Hospital in Brooklyn, N. Y., Dr. Babers entered the United States Army Medical Corps in March 1941, attaining the rank of lieutenant colonel. Dr. Babers served as chief of surgical services, 179th General Hospital and as commanding officer of the U.S.E.D. Hospital in Bermuda during World War II.

Returning to Gainesville in 1946, Dr. Babers has practiced surgery until the present time, excepting only a sabbatical at the University of Pennsylvania in 1952-53. He served the Alachua County Medical Society as president in 1952 and as chairman of the public relations committee and Blue Shield liaison committee.

During his 23 years with the Florida Medical Association, Dr. Babers has held many significant offices, including the following: Councilor, District B-3; chairman of the Committee on Advisory to Blue Shield; chairman of the Committee on Fee Schedules; chairman of the Committee on Medical Schools; member of the Board of Governors, and President-Elect.

A man of many talents, Dr. Babers holds membership in various distinguished professional organizations. Included among these are the American Medical Association, Southern Medical Association, American College of Surgeons, American Board of Surgery, Southeastern Surgical Congress and the Florida Association of General Surgeons, of which he is currently president. In addition, Dr. Babers has served as chief of staff at Alachua General Hospital, head of the Department of Surgery at Alachua General, and clinical assistant in surgery at the University of Florida College of Medicine. He is also a member of the board of directors of Blue Cross and Blue Shield of Florida, Inc.

Dr. Babers is married to the former Louisa Toms and they have had two children: a daughter, Cynthia, and a son, Dennis, who gave his life for the United States in Vietnam.

All members of the Association look forward to a productive and progressive year under the leadership of such a distinguished gentleman and dedicated physician.

Mr. Menendez is Program Analyst, Florida Medical Association.

Our President

Edwin H. Andrews, M.D.

I have known Henry Babers well since he first became a member of the Florida Medical Association, first as an associate and later as a fellow practitioner and friend.

Early in his career, hard work, tolerance and understanding became a way of life with him, and time has enhanced these traits. He is a kindly and patient man with a friendly smile and pleasant word for all. He has basic integrity, a dedicated sense of duty and loyalty to his family, country and profession. I have never known him to forsake a patient or friend nor renege on his word. He is a determined and persistent man with an inherent sense of humor and the ability to work amicably with others. He instills a feeling of trust and warmth in all those with whom he works. We are fortunate to have a man of this caliber for our President.

No one is better qualified or prepared for this office. He is competent and respected in his specialty, as attested to by the many professional societies and organizations of which he is a member. He has made an avocation of service to his community and organized medicine. Locally he has served creditably as president of his county medical society, chief of staff and head of the surgical department of his hospital and in his extra time served as a director in the Gainesville Chamber of Commerce.

At the state level, which has been his major love, he has served us continually for many years as a member or chairman of most of our policy-making boards and committees throughout our most trying and controversial years. This has been a period of expansion and adjustment. We have had the growth of the "Blues" and other third party participants, the establishment of two medical schools, Medicare, CHAMPUS, welfare patient care, and so on. These have all presented many problems with varying degrees of conflict for the private practitioner; much time and extensive study by our leaders and members has been given and they have given us workable answers.

I do not know what the future holds for us, but certainly it will be more complex. We already envision another medical school, Medicaid, regional medical programs and who knows what in the way of further government intervention and participation in the practice of medicine and administration of our hospitals.

If we are to continue to maintain our position of respect and be looked to for guidance in medical problems and matters in the future by the people and the government, we are going to need a lot more Henrys.

How fortunate we are to have such a mature and competent person with such a deep love of his work and fellow man to lead us.

▸ Dr. Andrews, P. O. Box 1025, Cedar Key 32625.

My Friend Henry

Robert E. Zellner, M.D.

"The heights by great men reached and kept
Were not attained by sudden flight
But they, while their companions slept,
Were toiling upward in the night."
Longfellow

"I came to bury Caesar, not praise him."
Shakespeare

When the Editor asked me to write a few well-chosen words about Henry Babers, the two quotations above came to mind: The first because Longfellow must have had someone like Henry in mind when he wrote it. The second because my problem is not at all like that of Mark Anthony. I came to talk about Henry Babers and it is rather difficult to do so without eulogizing, which I shall try not to do.

Now and then, one of my friends who has known of my medical organization activities will ask me "Why do you do it? What do you get out of it?" After giving it a good bit of thought the best answer I can give is that it has enabled me to get to know and to count as my friends a few people like Henry Babers. I say few because people like Henry are few and far between.

I first met Henry as a member of the first "Committee of 17." The story of this committee has been told and retold, but I repeat it because it shows Henry at his best. Florida Blue Shield, the child of the Florida Medical Association, had gone through a 12-year period of phenomenal growth. To a degree it had become introspective and concerned with itself. The doctors of Florida, while marvelling at their creation, had paid more attention to other more pressing problems. Then one day the parent and teen-aged son found that they no longer spoke the same language, that there was a serious communication gap between the two. The upshot was that by decision of the House of Delegates a committee of 17 doctors was appointed to find out "What is wrong with Blue Shield?". As chairman of that committee for three years, Henry, by patience, by diplomacy, by tact held 16 strong-minded people together for an in-depth study of the entire field of medical economics as it relates to prepaid health insurance and to the medical profession's obligation to provide guidance and solutions to the problems confronting it. The results speak for themselves. The communication gap was closed and a meaningful dialogue between Blue Shield and the doctors of medicine was established which has continued to this day. Florida Blue Shield is today the envy of people knowledgeable in medical economics throughout the country. Henry Babers can rightly be called the man who saved Blue Shield in Florida.

Generally speaking, it has been my experience that most people have some outstanding trait with which they can be characterized. This is not true of Henry Babers. He is thorough and thoughtful. He is candid but courteous. He is reflective and responsible. He is forthright and friendly. He is understanding and undaunted. If I had to pin down the one idea that suggests to me Henry Babers, I would say "He does his homework." Whatever he undertakes to do he does with distinction.

Henry's other activities have been detailed elsewhere and I won't repeat them. Suffice it to say that with the versatility of the gifted and the individuality of the rare, he has brought honor to the many titles he has borne. It is inevitable that he will be a distinguished president of the Florida Medical Association.

Dr. Zellner, 515 South Orange Avenue, Orlando 32801.

1969 State Science Fair Awards

EUGENE L. NIXON

Robert C. Benjamin, a Melbourne High School eleventh grader, carried off top medical honors in the 1969 Florida State Science Fair held April 10-12 in Jacksonville. It was the third consecutive year a Melbourne High School student has won the Florida Medical Association's first place senior division award for excellence in medically-related projects.

For his outstanding exhibit Mr. Benjamin received a $1,000 medical school scholarship donated by the Florida Medical Foundation and a $100 U. S. savings bond from the Association. The title of the winning project was "Biological Mechanisms of Genetic Repression; Biophysical Studies of Nucleohistone Complexes."

Lynn Anne Anthony, of Southside Junior High School, Jacksonville, received the FMA's first place junior division award. She won a $50 savings bond for her exhibit entitled "Long Term Effects of Norethindrone and Mestranol as Demonstrated in Mice."

Honorable mention awards, presented by the Association's Woman's Auxiliary, were won by John T. Roberts of Melbourne High School; Norlene Judy Elliott of Clay Junior-Senior High School, Green Cove Springs; Marcia Ziegler of Largo High School and Donn M. Hickman of Miami Edison Senior High School. Each honorable mention winner received a $25 savings bond and all of the students were awarded special certificates signed by the FMA and Auxiliary officers.

Presentation of the awards was made by President Jack Q. Cleveland of Coral Gables in a ceremony at the Jacksonville Civic Auditorium, in which the State Science Fair also was held. The winners were selected by a special FMA judging committee composed of Drs. Charles E. Bender Jr., William P. Booras, L. L. Parks and George S. Trotter, all of Jacksonville.

The annual FMA State Science Fair awards were established by the Board of Governors in 1956 to recognize scientific interest and efforts by junior and senior high school students and to encourage them to consider medical careers. The first place award certificate reads in part, "In commendation of an exemplary and original exhibit in the field of basic medical sciences and health." □



President Jack Q. Cleveland poses with 1969 FMA State Science Fair award winners.

The first Medihaler was developed for the physician-inventor's own child.

he improved model you prescribe today is still made with the same painstaking devotion.

When your patient is in the grip of bronchospasm and reaches for his Medihaler, it must work. Not sometimes. Not most of the time. *Always.*

This is the ideal of perfection which has motivated the constant process of improvement of Riker's Medihaler.

Since its invention in 1956—when a Riker physician developed the Medihaler because of his determination to make better treatment available for his own asthmatic child—Riker has pioneered just about every significant forward step in bronchodilator aerosol therapy.

Riker developed the precision Medihaler valve, which assures the delivery of an automatically measured dose each and every time.

Riker was first to formulate medication in a non-irritating, non-alcoholic vehicle.

Riker pioneered pre-grinding of the medication to 1-5 micron size, assuring maximum distribution to the distal bronchioles for greater topical effectiveness with less systemic action. (Oddly, even today not all competitors have adopted these two advances.)

Add to these advantages a quality control system involving 168 physical measurements and chemical tests, plus not one but two test firings on every single unit leaving the plant, and you can readily see why there is no more dependable relief for bronchospasm than your prescription for Duo-Medihaler or Medihaler-Iso.

Please see next page for complete prescribing information.

Medihaler-Iso®
(isoproterenol sulfate)



Duo-Medihaler®
isoproterenol HCl (4mg./cc.)
phenylephrine bitartrate (6mg./cc.)

Riker Laboratories, Northridge, California 91324
The Riker Representatives in your area are:
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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

Caution: Federal law prohibits dispensing without prescription.

Riker Laboratories Northridge, Calif. 91324

A Modern Psychiatric Hospital . . .



This modern psychiatric hospital is now fully operational. With completion of the comfortable seclusion rooms and lounge complex, Lakeland Manor is prepared to offer full psychiatric services. Treatment procedures are geared to the most modern concepts of psychiatry. Treatment includes intensive dynamic psychotherapy for the individual, group psychotherapy, chemotherapy, occupational and recreational therapy. Every effort is made to create a highly therapeutic milieu. Patients are admitted on referral of their physicians either on a voluntary basis or commitment. All types of emotionally ill patients are accepted, including those with alcohol addiction. All patients are treated by private psychiatrists who make regular reports to the referring physician on the patient's progress.

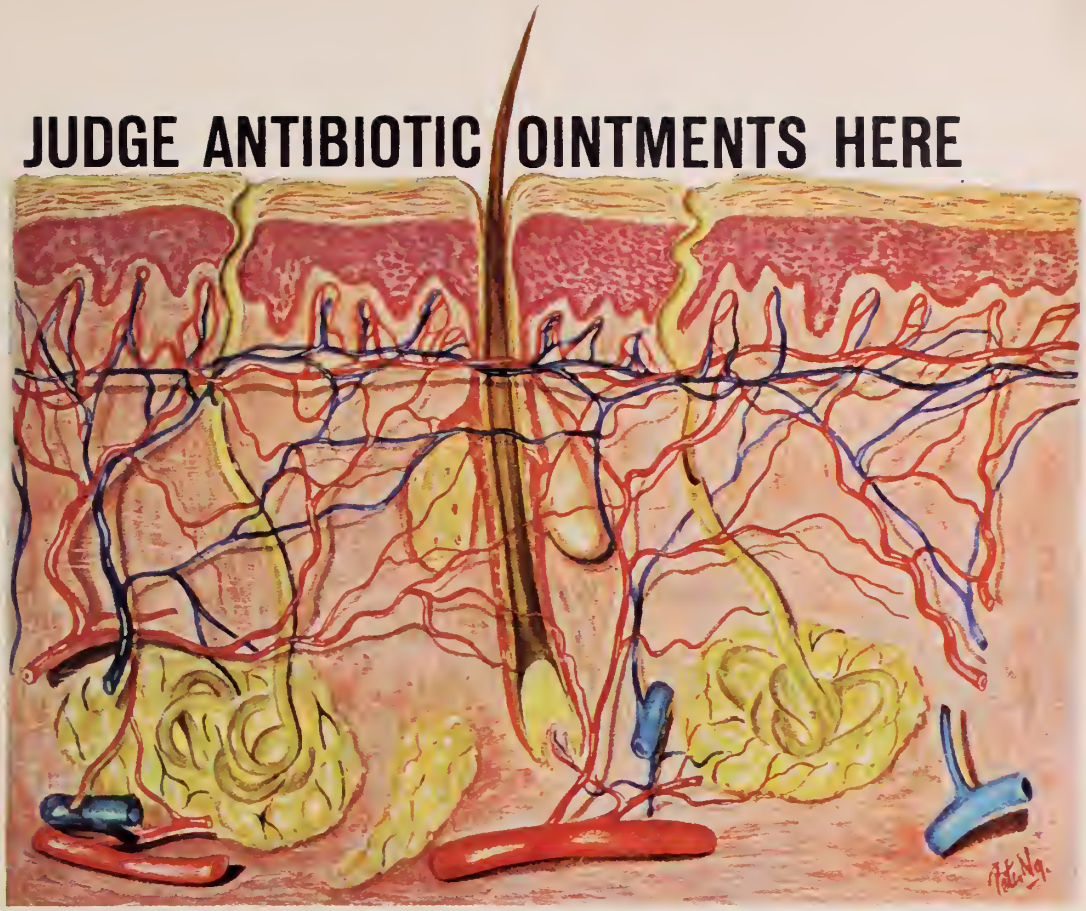
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Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.
Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

Mild ulcerative colitis may be triggered here...



In mild ulcerative colitis, a number of factors can precipitate an attack: for instance, dietary indiscretion, such as eating raw foods, or emotional overreaction, such as that aroused by financial difficulties. No matter what causes the patient's sensitive colon to "act up," he soon suffers from acute discomfort...and often, from anxiety and apprehension as well. Such patients frequently respond well to adjunctive dual-action Librax® therapy.

Librax combines, in a single convenient capsule, the well-known antianxiety effect of Librium® (chlordiazepoxide HCl) and the dependable anticholinergic/antispasmodic effect of Quarzan® (clidinium Br). Therefore, as Librax helps to relieve the patient's excessive anxiety and reduce his overreaction to stress, it also, at the same time, helps to control hypersecretion and hypermotility, thus relieving spasm and abdominal discomfort.

With Librax, the dosage schedule is simple: 1 or 2 capsules, t.i.d. or q.i.d., will in most cases bring the patient significant relief of both the emotional and physical elements that contribute to his psychovisceral disorder.

Before prescribing, please consult complete product information, a summary of which follows.

INDICATIONS: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

CONTRAINDICATIONS: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide HCl and/or clidinium bromide.

WARNINGS: Caution patients about possible combined effects with alcohol and other CN depressants. As with all CNS-acting drugs, cau tion patients against hazardous occupations re quiring complete mental alertness (*e.g.*, operatin machinery, driving). Though physical and psy chological dependence have rarely been reporte on recommended doses, use caution in ad ministering Librium (chlordiazepoxide hydr chloride) to known addiction-prone individual or those who might increase dosage; withdrawa symptoms (including convulsions), followin discontinuation of the drug and similar to thos seen with barbiturates, have been reported. Us of any drug in pregnancy, lactation, or in wome of childbearing age requires that its potentia benefits be weighed against its possible hazards As with all anticholinergic drugs, an inhibitin effect on lactation may occur.

PRECAUTIONS: In elderly and debilitated limit dosage to smallest effective amount to pre clude development of ataxia, oversedation o confusion (not more than two capsules per da initially; increase gradually as needed and toler

or here.



ted). Though generally not recommended, if ombination therapy with other psychotropics eems indicated, carefully consider individual harmacologic effects, particularly in use of po- entiating drugs such as MAO inhibitors and henothiazines. Observe usual precautions in resence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimula- ion and acute rage) have been reported in psy- hiatric patients. Employ usual precautions in reatment of anxiety states with evidence of im- pending depression; suicidal tendencies may be present and protective measures necessary. Vari- able effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relation- ship has not been established clinically.

ADVERSE REACTIONS: No side effects or manifestations not seen with either compound alone have been reported with Librax. When chlordiazepoxide hydrochloride is used alone, drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver-function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics, and/or low residue diet.

two good reasons for prescribing LIBRAX®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

ROCHE
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Nutley, New Jersey 07110



Nose clear as a whistle

(THANKS TO DIMETAPP®)

Dimetapp Extentabs® does an outstanding job of helping to clear up the stuffiness, drip and congestion of colds and upper respiratory allergies and infections. Each Extentab keeps working up to 12 hours. And for most patients drowsiness or overstimulation is unlikely. Try Dimetapp. It clearly works.

FOR UPPER RESPIRATORY ALLERGIES AND INFECTIONS

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

UP TO 12 HOURS CLEAR BREATHING ON ONE TABLET

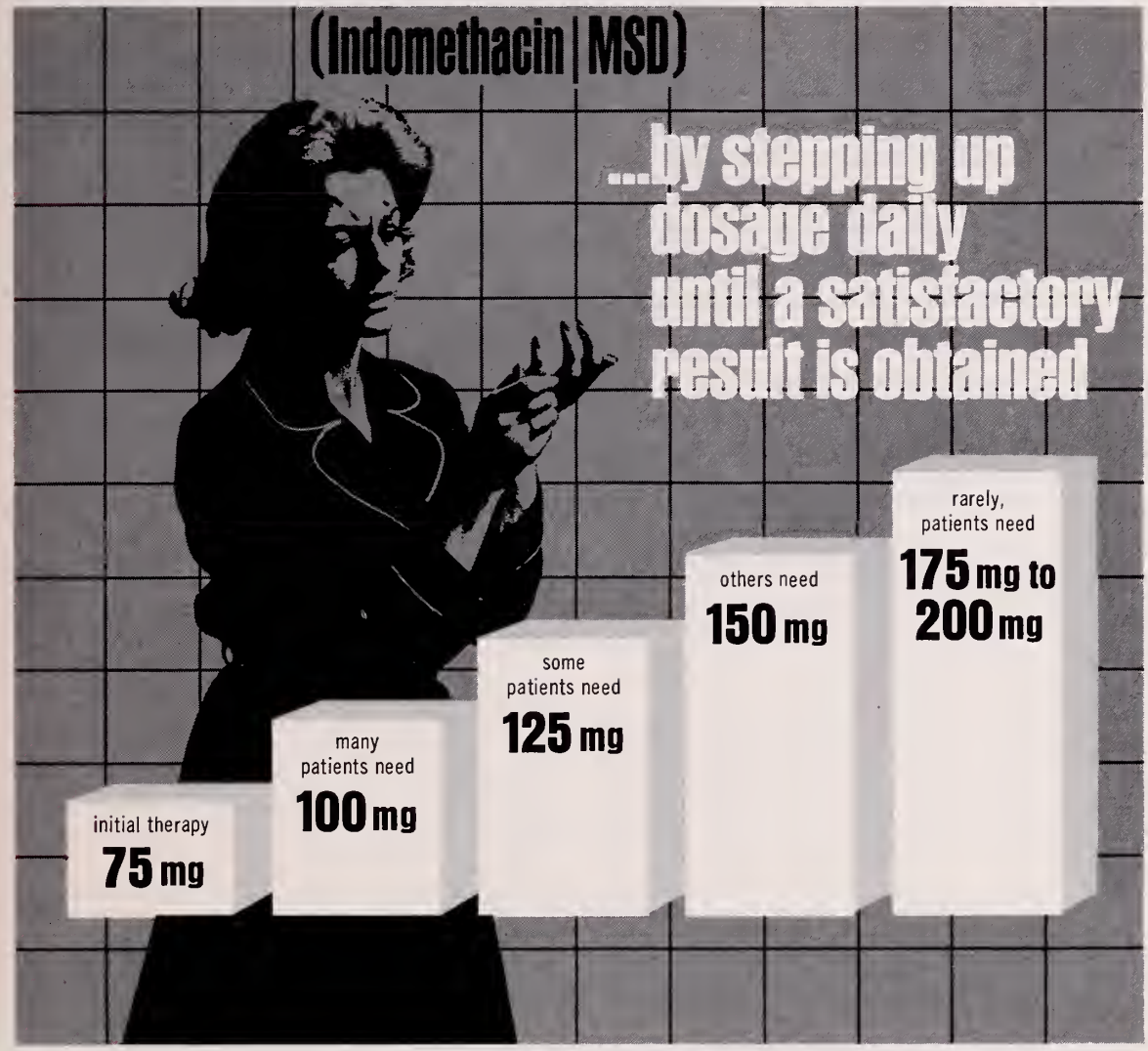
Indications: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, seasonal allergies, sinusitis, rhinitis, conjunctivitis, and otitis.
Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

A.H. ROBINS COMPANY
RICHMOND, VA. 23220

A·H·ROBINS

In selected cases of rheumatoid arthritis with acute symptoms

Response to INDOCIN® is often improved...



Many patients with acute rheumatoid arthritis or acute episodes of chronic rheumatoid arthritis can be controlled by increasing the dosage 25 mg *per day* (to the allowable maximum) until the episode subsides; the dosage should then be reduced gradually to maintenance levels. Few require the maximum (175–200 mg).

In the event the patient develops adverse effects, dosage should be reduced to tolerated levels for 2 or 3 days and then gradually increased by 25 mg every few days as tolerated. G.I. effects may be minimized by giving INDOCIN with food, antacids, or immediately after meals.

Now in two strengths
25 mg and 50 mg



Actual Size

INDOCIN®
(Indomethacin | MSD)

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended under *Indications.* The drug should not be prescribed for children because safe conditions for use have not been established.

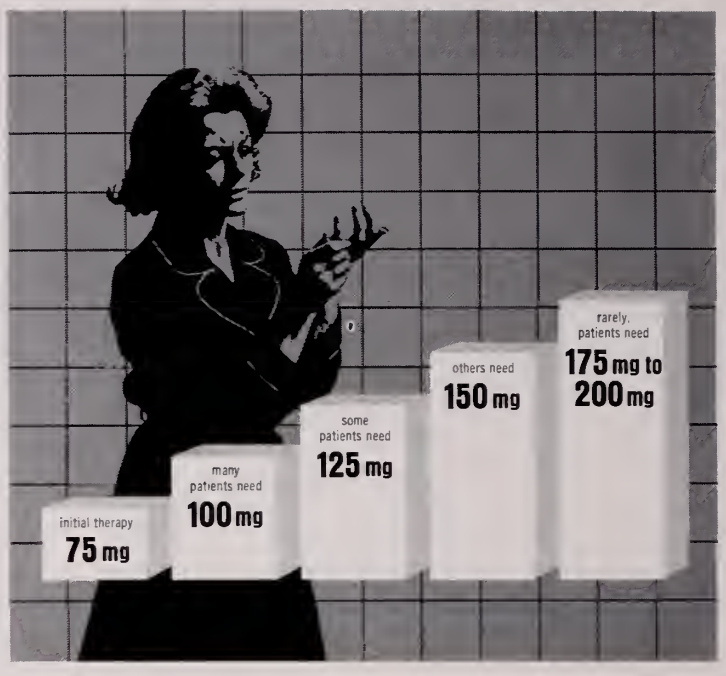
CONTRAINDICATED:

- in aspirin-sensitive asthmatics
- during pregnancy or lactation
- in children
- INDOCIN may mask the signs and symptoms of peptic ulcer and may cause ulceration or irritation of the G.I. tract. Therefore, do not give in active peptic ulcer, gastritis, regional enteritis, ulcerative colitis, and use with caution if there is a history of these disorders.

For additional prescribing information, please see following page.

In selected cases
of rheumatoid arthritis
with acute symptoms

Response to INDOCIN® (Indomethacin | MSD) is often improved by stepping up dosage daily until a satisfactory result is obtained



IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended under Indications. The drug should not be prescribed for children because safe conditions for use have not been established.

Indications: For the symptomatic treatment of rheumatoid arthritis, rheumatoid (ankylosing) spondylitis, degenerative joint disease (osteoarthritis) of the hip, and gout.

Contraindications: INDOCIN may mask the signs and symptoms of peptic ulcer and may itself cause peptic ulceration or irritation of the G.I. tract. For these reasons it should not be given to patients with active peptic ulcer, gastritis, regional enteritis, or ulcerative colitis (use with caution if there is history of these disorders); aspirin-sensitive asthmatics. Safe use during pregnancy or during lactation has not been established. Should not be prescribed for children because safe conditions for use have not been established. In a few cases of severe juvenile rheumatoid arthritis receiving INDOCIN along with other drugs, severe reactions, including fatalities, have been reported.

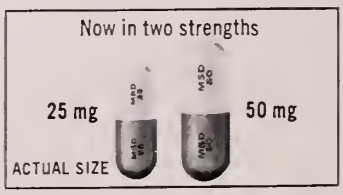
Warnings: Patients who experience dizziness, lightheadedness, or feelings of detachment on INDOCIN should be cautioned against operating motor vehicles or machinery, climbing ladders, etc. Use cautiously in patients with psychiatric disturbances, epilepsy, or parkinsonism since it may aggravate these conditions.

Precautions: Use cautiously in patients with a history of peptic ulcer, gastritis, regional ileitis, or ulcerative colitis because of its potential for causing G.I. bleeding. May cause single or multiple ulceration of the esophagus, stomach, duodenum, or small intestine, and, in a few instances, severe bleeding and perforation with a few fatalities have been reported. May potentiate the ulcerogenic effect of steroids, salicylates, or phenylbutazone. Gastrointestinal bleeding with no obvious ulcer formation has also been noted; the drug should be discontinued if G.I. bleeding occurs. As a result of obvious or occult G.I. bleeding, some patients may manifest anemia, and for this reason periodic hemoglobin determinations are recommended. G.I. effects may be minimized by giving the drug with food or with antacids or immediately after meals. In common with other drugs that have anti-inflammatory, analgesic, and antipyretic properties, indomethacin may mask the signs and symptoms of infection; avoid undue delay in initiating appropriate treatment of the infection; use cautiously in patients with existing, but controlled, infections. As with any new drug, patients should be followed carefully to detect unusual manifestations of drug sensitivity.

Adverse Reactions: Starting therapy with low doses, with gradual increases when necessary, will minimize adverse reactions. *Central Nervous System:* Most commonly, headache (usually more severe in morning), dizziness, and lightheadedness; infrequently observed reactions include mental confusion, drowsiness, convulsions, coma, depression, and other psychic disturbances, such as depersonalization; CNS effects are often transient and frequently disappear with continued treatment or reduced dosage. The severity of these effects may occasionally require cessation of therapy. *Gastrointestinal:* Most commonly, nausea, anorexia, vomiting, epigastric distress, abdominal pain, and diarrhea; others that may develop are ulceration, single or multiple, of esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage with a few fatalities having been reported; G.I. bleeding without obvious ulcer formation, increased abdominal pain in patients with preexisting ulcerative colitis; less commonly, stomatitis; gastritis; bleeding from the sigmoid colon, occult in type or from a diverticulum, and perforation of preexisting sigmoid lesions (diverticulum, carcinoma); G.I. reactions not known definitely to be attributable to indomethacin include development of ulcerative colitis and of regional ileitis. *Hepatic:* Rarely, jaundice and hepatitis. *Cardiovascular-Renal:* Infrequently, edema, elevation of blood pressure, and hematuria. *Dermatologic-Hypersensitivity:* Infrequently, pruritus, urticaria, angioneurotic edema, angiitis, skin rashes, loss of hair, and acute respiratory distress including sudden dyspnea and asthma. *Hematologic:* Infrequently, leukopenia, purpura, and thrombocytopenia; rarely, agranulocytosis and bone marrow depression have been reported, but a definite relationship to the drug has not been established; since some patients may manifest anemia secondary to obvious or occult G.I. bleeding, periodic hemoglobin determinations are recommended. *Eye-Ear:* Infrequently, tinnitus, blurred vision, hearing disturbance, and orbital and periorbital pain. *Miscellaneous:* Rarely, vaginal bleeding, hyperglycemia, and glycosuria.

Supplied: Capsules containing 25 mg indomethacin each, in bottles of 100 and 1000; capsules containing 50 mg indomethacin each, in bottles of 100.

For more detailed information, consult your Merck Sharp & Dohme representative or see the package circular.



MERCK SHARP & DOHME Division of Merck & Co. Inc. West Point Pa 19486

WHERE TODAY'S THEORY IS TOMORROW'S THERAPY



HIGHLAND HOSPITAL

ASHEVILLE, NORTH CAROLINA

Founded 1904

A DIVISION OF THE DEPARTMENT OF PSYCHIATRY
OF DUKE UNIVERSITY

Accredited by the Joint Commission on Accreditation and Certified for Medicare

Complete facilities for evaluation and intensive treatment of psychiatric patients, including individual psychotherapy, group therapy, psychodrama, electro-convulsive therapy, Indoklon convulsive therapy, drugs, social service work with families, family therapy, and an extensive and well organized activities program, including occupational therapy, art therapy, athletic activities and games, recreational activities and outings. The treatment program of each patient is carefully supervised in order that the therapeutic needs of each patient may be realized.

High school facilities for a limited number of appropriate patients are now available on grounds. The School Program is fully integrated into the hospital treatment program and is accredited through the Asheville School System.

Complete modern facilities with 85 acres of landscaped and wooded grounds in the City of Asheville.

Brochures and information on financial arrangements available
Contact: Mrs. Elizabeth Harkins, ACSW, Coordinator of Admissions

or

Charles W. Neville, Jr., M.D.
Assistant Professor of Psychiatry and Medical Director
Area Code 704 - 254-3201

But before you prescribe Pertofrane, please see the full prescribing information and especially note Contraindications, Precautions, Warning, Adverse Reactions and Dosage. A brief summary of that information is included here.

Pertofrane® desipramine hydrochloride

Indications: For relief of depression.
Contraindications: Do not use drugs of the M.A.O.I. class with Pertofrane. Hyperpyretic crises or severe convulsive seizures may occur; potentiation of adverse effects can be serious or even fatal. When substituting this drug in patients receiving an M.A.O.I., allow an interval of at least 7 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed.
Warning: Activation of psychosis may occasionally be observed in schizophrenic patients. Do not use in patients under 12 years old, and do not use in women who are or may become pregnant unless the clinical situation warrants the potential risk.
Precautions: Careful supervision and protective measures for potentially suicidal patients are necessary. Discontinuation of therapy or adjunctive use of a sedative or tranquilizer may be necessary in the presence of increased anxiety or agitation, hypomania or manic excitement. However, phenothiazines may aggravate the condition. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Carefully observe patients with increased intraocular pressure. Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications. Cardiovascular complications (myocardial infarction and arrhythmias) are potential risks since they have occasionally occurred with imipramine, the parent compound. Desipramine may block the pharmacologic activity of guanethidine and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery in patients on desipramine therapy.
Before prescribing the drug, the physician should be thoroughly familiar with prescribing information, with the literature, with all adverse reactions, with the diagnosis and management of depression, and with the relative merits of all measures for treating the condition.
Adverse Reactions: Dry mouth, constipation, disturbed visual accommodation, anorexia, perspiration, insomnia, drowsiness, dizziness, headache, nausea, epigastric distress, and skin rash (including photosensitization) may appear. Since orthostatic hypotension has occurred, carefully observe patients requiring concomitant vasodilating therapy, particularly during the initial phases. Other adverse reactions include tachycardia, changes in EEG patterns, tremor, falling, mild extrapyramidal activity, neuromuscular incoordination, epileptiform seizures. A confusional state (with such symptoms as hallucinations and disorientation) occurs occasionally and may require reduced dosage or discontinuance of therapy. Rarely, transient eosinophilia, slight elevation in transaminase levels, transient jaundice, or liver damage have occurred. If abnormalities occur in liver function tests, discontinue drug and investigate. Occasional hormonal effects, particularly decreased libido or impotence and instances of gynecomastia, galactorrhea and female breast enlargement have been observed. Urinary frequency or retention may occur. The drug should be discontinued if agranulocytosis, bone marrow depression, jaundice, thrombocytopenia, or purpura occur.
Dosage: 25 to 50 mg. t.i.d. The maximum daily dose is 200 mg. Continue maintenance dosage for at least 2 months after obtaining satisfactory response. Generally, elderly and adolescent patients should be given low doses.
Availability: Pink capsules of 25 mg. in bottles of 100 and 1000. (B) 46-530-E

For complete details, please see the prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

What makes

A man?
Another woman?
Three kids?
No kids at all?
Wrinkles?
You name it.

Is she truly depressed?

Is that why she lets go in your office?

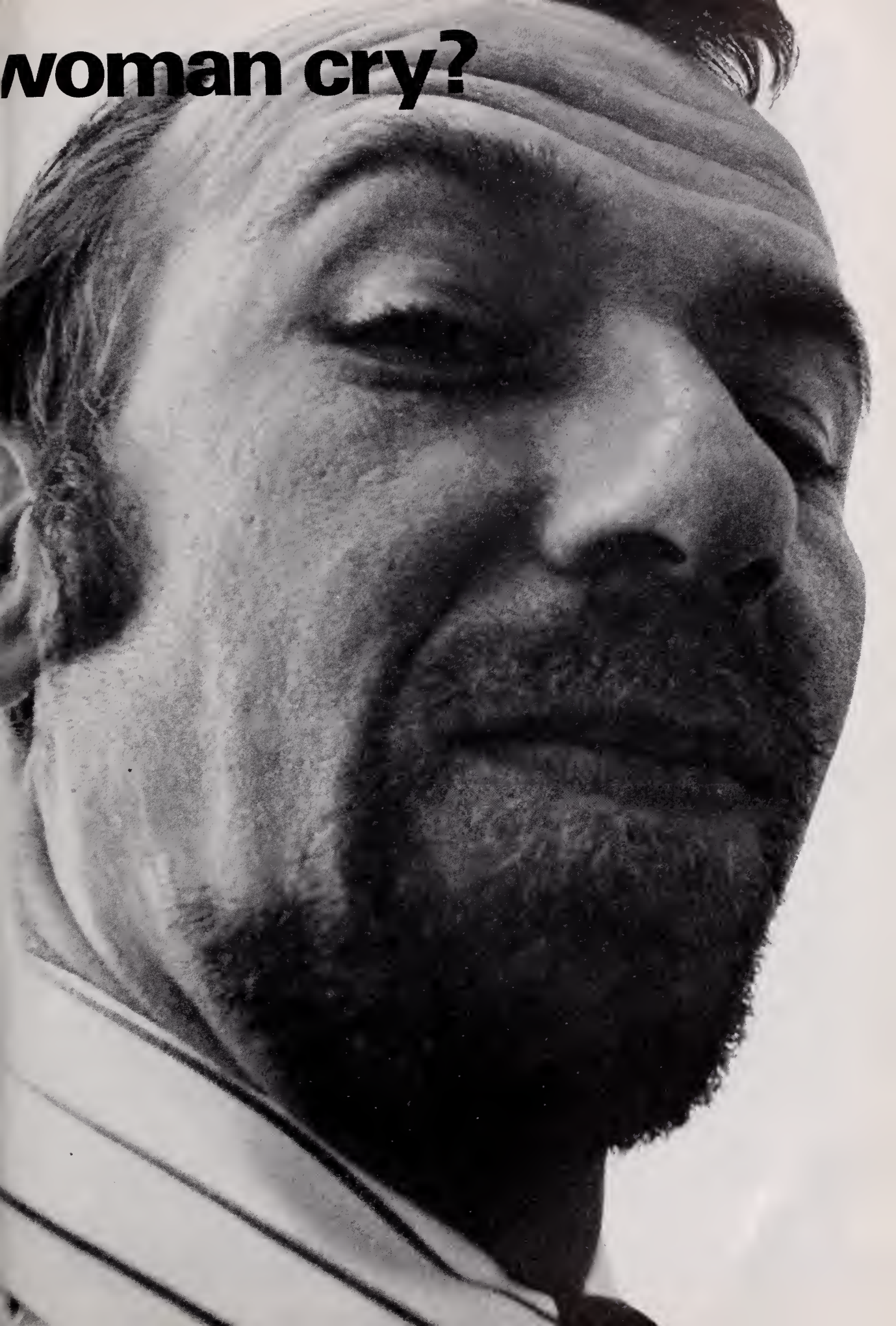
You comfort her.
Talk to her.
And, if she is depressed consider Pertofrane.
Because
in 3 to 5 days
she can often begin
to cope,
work,
maybe play,
even enjoy.

Pertofrane®

desipramine hydrochlo

In depression...
when words are not en

Woman cry?





STAMAS V-26 AMERICANA DELUXE — America's most popular family boat. Superbly seaworthy! Softtop, hardtop and new flybridge models.

STAMAS V-24 AEGEAN DELUXE — Revolutionary new runabout that sleeps four. Runabout, cabin cruiser, fisherman —in one! Sporty!

for the remarkable

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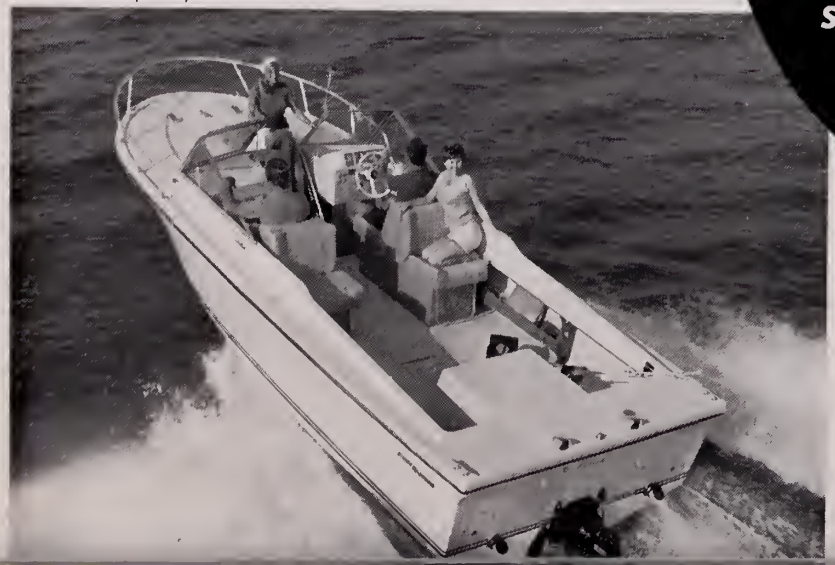
LEVEL RIDE

SMOOTH AND DRY AT ALL SPEEDS, IN ANY WATER



STAMAS V-24 CLEARWATER DELUXE* — Big-boat spaciousness; trailerable convenience. Walk-thru from roomy cabin in forward deck.

STAMAS V-24 TARPON DELUXE — World's only open fisherman with the privacy of an enclosed marine head. Self-circulating bait well.



all V-24's are 8 ft. beam, trailerable anywhere without special permits. For nearest dealer of these and the new V-18 Spartan, write Stamas Boats, Inc., Dept. J, Tarpon Springs, Florida 33589.



Florida Medical | editorial

Glimpses of the Annual Meeting

Clyde M. Collins, M.D.

To all members of the Florida Medical Association, greetings, and to those who failed to attend the 95th annual meeting at the Americana last month, condolences. The first session of the House of Delegates was conducted expeditiously by speaker Jim Cook. The delegates were inspired by an address from Hon. Mark Hulsey, president-elect of the Florida Bar, who urged us to become involved and uphold the "establishment" which some elements in America are trying to destroy. Dr. Jack Cleveland, in his annual address, stated "Participation that will halt changes which are not in the interest of better patient care begins in your county or component medical society. It is the most important segment of organized medicine. This is where everything starts."

The second day was highlighted by addresses from two speakers, neither of whom are doctors, but either one alone worth traveling across the state to hear! The Abel Baldwin memorial lecturer was the Hon. Calvin Johnson, a descendant of Ephraim McDowell and himself a former member of the U.S. House of Representatives who, after one year of high school, started work as a carpenter and began his political career by running for the local school board. His oratory kept me on the edge of my chair, as he restated the principles on which this country was founded, that America is and will continue to be the land of opportunity. "Sweat," he said, "is the cure for our economic ills."

Joseph Von Thron, the president-elect of FLAMPAC, introduced the speaker at the annual sumptuous luncheon as Senator George Murphy, CALIF. (Spelled "Come And Live In Florida"!). The Senator's address was one of the most sensible and informative talks I have heard in reference to problems of government and medical care.

I was impressed by the rash of Honduras cigars seen in the mouths of so many who had sworn off cigarettes.

I was impressed by the remarks of everyone who saw the floor show in the Americana, not on how scantily the dancers were dressed, not about the trained monkey who refused to take his hand down after saluting when the pledge of allegiance was recited, but by the heart-tugging statement of his trainer who shouted to the audience, "Would that more Americans had as much sense!"

I was impressed by the friendships in evidence at Dr. Cleveland's reception, the pride expressed by his lovely wife, the retelling of bygone days by past presidents Ed Jelks and "Hog" Roberts, Drs. W. C. Thomas and Walter Jones.

I was impressed by Joe Stewart who became active again to conduct a reference committee in the statesman-like, scholarly manner I remembered when he presided over the House of Delegates years ago.

Finally, I was impressed by the editor of our Journal, who, recuperating less than a week from a fractured dorsal vertebra, held a luncheon for the editorial staff, helped and inspired each of us to gather new material for future issues of your Journal, and oversaw the many chores of our excellent full-time staff.

From the Editor

Franz Stewart

The Presidential Triple Play
Cleveland to Babers to Cook

Dr. Jack Cleveland of Coral Gables did his job as president throughout the annual meeting in May and we looked at the president with pride. Just as we got used to this, Dr. Cleveland turned over the gavel to Dr. Henry Babers of Gainesville who took over the job as president and this is good. But then, the real excitement came with the voting for the president-elect, Dr. James T. Cook, of Marianna.

For elderly patients in need of a mild tranquilizer consider **Tybatran®**

brand of tybamate

(When you consult the Prescribing Information you may agree it makes good sense)



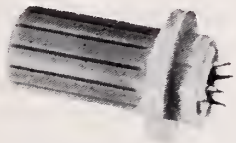
RIBING INFORMATION

ıtions: Tybatran (tybamate) has afforded sympto-
nprovement in a variety of psychoneurotic disor-
pecially in the treatment of the anxiety and tension
ents of psychoneuroses. Anxiety states manifested
ally have responded to Tybatran (tybamate).
tran (tybamate) has been useful in the control of
n in the aged and in the alleviation of some of the
emotional accompaniments of senility.
tran (tybamate) has been used with benefit in the
nt of depressive symptoms associated with anxiety
er symptoms of psychoneuroses. However, it is not
:d for primary treatment of depressive states. It is
antipsychotic agent, although it has been used as
ive therapy in some psychotic patients.
ge: One 350 mg. capsule, 3 times daily and two at
e is suggested as the adult starting dose. Adjust to
lividual requirements. Daily doses above 3000 mg.
recommended.
raindications: Known hypersensitivity to tybamate.
ıo studies have been done with this drug in human
ncy, it should not be used in pregnancy unless the
al benefit outweighs the risk.
nings: Administer cautiously to patients receiving
hiazines or other CNS depressants or having his-
convulsive seizures (See Adverse Reactions). Con-
ossibility of additive actions with alcohol or other
tropic agents, particularly phenothiazines or MAO
ors.
autions: Avoid abrupt withdrawal after prolonged
hough withdrawal symptoms have not been reported
. Exercise caution in addiction-prone individuals. If
oms of hypersensitivity occur, discontinue at once
itiate appropriate symptomatic treatment. Avoid
es requiring optimal mental alertness if drowsiness
igo are present. As with any new drug, use cautiously
ents with history of drug allergies, blood dyscrasias,
epatic or renal disease; periodic measurements of
, hematopoietic and renal function should accom-
rolonged and/or high doses.
erse Reactions: Most frequent reactions, rarely re-
discontinuation of tybamate, include drowsiness,
ss, nausea, insomnia, and euphoria. There have been
eports of skin rash, urticaria, and pruritus. Rare side
include hyperactivity, fidgetiness, flushing, and tach-
ı, suggesting excessive stimulation; also ataxia, un-
ıess, confusion, feeling of unreality, "panic reaction,"
, headache, paresthesias, vertigo, gastrointestinal
ıances, glossitis, and dry mouth. Grand mal or petit
izures have been reported in a few hospitalized psy-
patients receiving tybamate (up to 6000 mg. daily)
er with phenothiazines and other psychotropic
, but not with tybamate alone. Consider the possibil-
rare, serious adverse reactions such as may occur
he related drug, meprobamate. If excessive amounts
gested, gastric lavage and symptomatic therapy, in-
g central stimulants as necessary, are recommended.
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Legislative Remedies to Stem the Malpractice Avalanche

Franklin Jay Evans, M.D., LL.B.

It is needless to dwell upon the horrendous professional liability insurance situation which prevails this year in all of Florida, but most particularly in Dade County. Every physician in the state has felt the sharp sting of huge premium increases—in Dade County from 100% to as much as 300%. The few companies that still insure against malpractice defend their position on the basis of continuing loss experience in this field of insurance, due to greater numbers of malpractice suits being filed, larger settlements and judgments, and higher legal expenses involved in defending these suits.

Whatever the reasons for the rapidly deteriorating malpractice insurance picture, it is fairly certain that the condition will not improve in the foreseeable future; therefore, something must be done, and it must be done now, before an untenable impasse is reached. Doctors might find themselves without malpractice insurance as the few remaining companies quit this risk-laden field. Or, the malpractice insurance rates may rise so high as to become confiscatory.

Thus, for the sake of the doctor, the insurance carriers, and the people (who in the long run will be the principal losers as the cost of medical care goes up and the quality goes down), some action must be taken to bring the situation under control —and the only effective action I can think of is legislative action.

Such a step is not without precedent. In 1967, confronted with the same situation, leaders among physicians, malpractice defense attorneys and insurance carriers recommended a remedial program to the California legislature, part of which was enacted into law.

In the same manner and for similar reasons, I would propose that the Florida legislature give critical consideration to the following suggestions to help stem the tidal wave of lawsuits and rising costs:

1. A limit on damages recoverable in medical malpractice cases (the ceiling to be set by the legislature), or at least, a more scientific approach to the measurement of damages; perhaps a relative value scale for measuring injuries, and so on.

2. Posting of a bond by a claimant in a malpractice action of from $500 to $1,000, said bond to be awarded to the defendant physician if the verdict goes in his favor. This, too, is not without precedent, because in California, a claimant in a suit for negligence against an engineer, architect, building designer or land surveyor must file a $500 bond as security for defense costs.

3. The doctrine of res ipsa loquitur should be barred in malpractice cases, as has been done in Alaska.

4. Reduction of the statute of limitations for medical malpractice to one or two years, with a clear definition as to when the statute begins to run.

5. Clarification of and limitations upon the doctrine of informed consent.

It is true that the Florida legislature is already in session and the introduction of as far-reaching a legislative program as the above may not make much headway. However, the least that could be accomplished at this session, in my humble opinion, is the introduction of a resolution in the House (and possibly the Senate) authorizing the appointment of a special committee to study in depth the subject of medical malpractice, including the above proposals, and to report its findings and recommendations to the next session of the legislature which, under the new constitution, will be in 1970.

I wish to emphasize in this closing remark that physicians do not ask for immunity or special treatment or protection against responsibility for mistakes, but rather that the equities in medical malpractice be achieved.

▶ Dr. Evans, 147 Alhambra Circle, Coral Gables 33134.

editorial comment

FLOYD K. HURT, M.D.

Dr. Evans is to be commended for facing the problem of insurance protection for medical malpractice, for the experience in other states is a warning of things which can and will happen in Florida if steps are not taken now to build a stronger basis for our FMA professional liability program. A single malpractice claim could possibly have a lasting detrimental effect on any physician's professional career.

At present in some sections of our state no *new* liability contracts are accepted except through the FMA insurance program. Other contracts are accepted but only if other types of insurance are included such as home, car, life, et cetera. There have been between 15 to 20 companies which have refused to renew contracts, and the field of those which will continue to do so is becoming smaller. To date, there are 3,159 contracts in professional liability in the FMA program and, of these, 1,134 have additional coverage under the "umbrella" contract. From 1963 through 1968, the premiums amounted to $1,925,202, and the losses were $1,291,317. This loss figure does not yet reveal the loss which will be experienced on claims received during 1967 and 1968 as all claims have not been settled or paid. Some may not yet have even been filed. It was necessary to increase the premiums last year and for the first time Dade County was separately rated because of their high losses, but even so, the rates are lower than the Bureau rates.

Dr. Evans' plans are of a long range nature, and for an immediate program, I would suggest that each physician become acquainted with the FMA program, whether or not he wishes to participate, and that each county medical society have an orientation program for new members to teach them basic malpractice prophylaxis and the responsibilities of insured physicians.

We have a sound malpractice protection program and if understood and properly used, it will prove invaluable. Let's all work to improve it and keep it effective.

▸ Dr. Hurt, 460 St. James Building, Jacksonville 32202.

Dr. Hurt is secretary-treasurer, Florida Medical Association.

editorial comment

RICHARD A. WORSHAM, M.D.

This brief, well-written editorial points out one way to improve our present liability insurance situation, namely through state legislation.

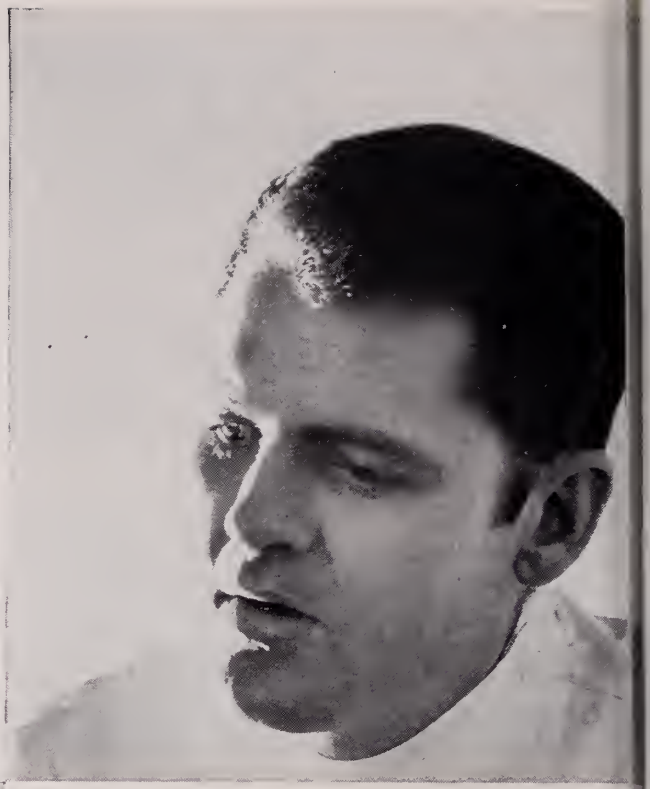
We must begin and begin now, as Dr. Evans implores us.

I fear it will be hard sledding for so poorly a politically organized profession as ours. Individually, the legislators respect us, but as a group, they say we are weak. Not even one half of our state members pay their FLAMPAC dues! So if we are to bring about this needed legislation for the good of medicine, we must become more politically powerful.

▸ Dr. Worsham, 2123 Park Street, Jacksonville 32204.

Dr. Worsham is chairman, Committee on Members Insurance, Florida Medical Association.

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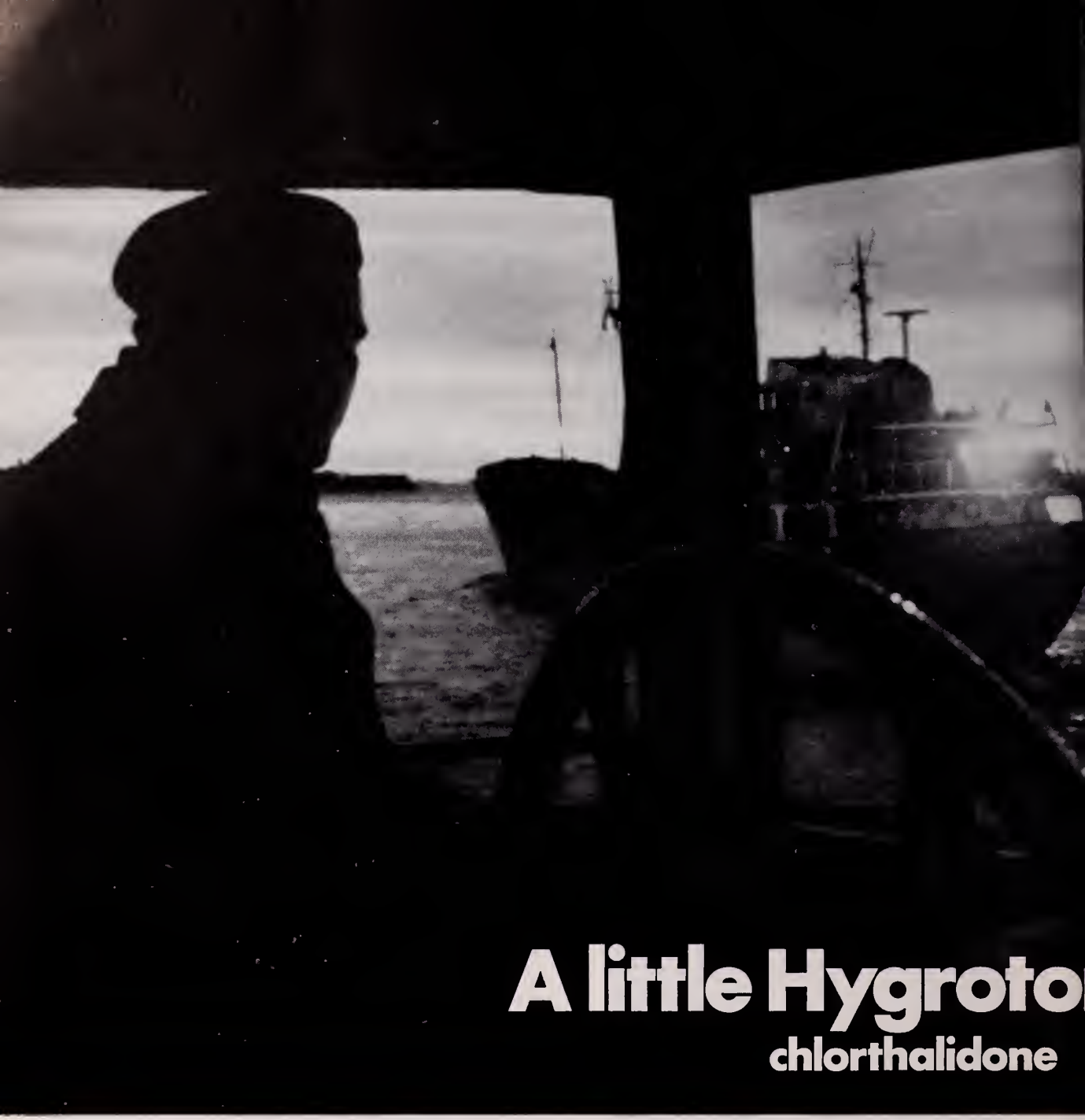
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ck the prescribing information. It's summarized on the next page.

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Use with caution in pregnant women and nursing mothers since the drug may cross the placental barrier and appear in cord blood and since thiazides may appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and passibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in pastsympathectomy patients and in patients receiving ganglionic blocking agents, other patent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or patassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and patassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypatension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reparted with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

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A. No. On the contrary, Medi Card both complements and supplements Blue Cross/Blue Shield and other pre-paid insurance programs; that portion which your patient would normally pay by cash may be charged to Medi Card.

Q. Can Medi Card now take over my patients' accounts receivable?

A. Medi Card cannot take over your patients' accounts receivable at this time but will process all patient applications received from you without charge.

Q. Do you make an individual credit check on each one of my patients?

A. Every application for Medi Card receives a thorough credit check before any card is issued.

Q. Are patient application forms readily available?

A. Yes. Applications to Medi Card are included in your professional kit and additional ones are available without charge.

Q. What methods will you use for collecting delinquent accounts? How does my state professional society feel about this?

A. Delinquent accounts will be automatically transferred to the same collection agency currently used by your local professional society.

Q. How does the AMA, the ADA, the AHA and my state professional society feel about Medi Card?

A. All terms of the Medi Card program have been presented and thoroughly discussed with these professional associations. They have informed us that they neither approve nor disapprove of Medi Card, they have no objections to our presenting the program to the individual members of the professions.

Q. Do I have to join, or become a member of Medi Card? Is there anything to pay in order to participate in the Medi Card program?

A. There is nothing to pay. You neither join Medi Card nor make any agreement with Medi Card. You merely honor the credit card upon its presentation, and are required to sign a statement accompanying the patient's first draft acknowledging your understanding of the program and Medi Card's 6% service charge.

Q. Can a card holder's Medi Card be used by various members of the family?

A. Medi Card may be used by any member of the family providing the card holder signs the Medi Card draft.

Q. What about Medi Card's financial responsibility?

A. Medi Card, a publicly held corporation, is associated in this program with Financial Services, Inc., a wholly owned subsidiary of the Diners Club.

Q. How much paperwork is involved?

A. The Medi Card draft is the simplest form ever devised for the payment of professional fees and services. Only two lines of the draft have been allotted for briefly outlining treatment. It is as fast as writing a personal check.

Q. Is there recourse to me in the event the patient does not pay Medi Card?

A. There is no recourse whatsoever. All the collection responsibility lies with Medi Card thus freeing you to maintain a professional relationship with your patient.

Q. Under what conditions will Medi Card refuse to pay a draft?

A. (1) Where the charge is incurred after the expiration date shown on the card. (2) Failure to fill out and mail processing card to us before, or along with, first draft.

Q. How much of my bill will Medi Card pay?

A. Medi Card will pay you up to the amount of credit shown on the face of the card, less the service charge.

Q. How does Medi Card protect the cardholder?

A. (1) Medi Card protects the cardholder by providing funds for professional services in amounts from $100 to $5,000 when they are needed. (2) Medi Card further protects the cardholder and his family by providing a 24-hour nationwide emergency medical information service making personal medical information available immediately through the use of a Medi Card toll-free telephone credit call. (3) In addition, this service provides all necessary professional payment information to the caller.

Q. How will I know each individual patient's Credit Limit?

A. Each patient's Credit Limit is clearly shown on the face of his Medi Card.

Q. Will you publish a list of professional participants?

A. No. Medi Card will not publish such a list because professional participants are not members of Medi Card.

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REFERENCES: (1) Sands, R.X.: New York St. J. Med. 61:2598-2602, 1961; (2) Renner, M.J., et al.: Hosp. Topics 39:71-73, 1961; (3) Haas, Jr., J., and Kay, L. L.: Southwest Med. 42:30-32,1961; (4) Marshall, W.: Clin. Med. 7:499-502, 1960; (5) Strauss B.: Clin. Med. 4:307-310, 1957.

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MAR. 19

Regional Medical Program Receives Operational Grants

Granville W. Larimore, M.D.

Results of planning by Florida physicians initiated a scant three years ago became apparent recently when the Florida Regional Medical Program announced funds for nine operational projects.

The projects relate to various phases of the FRMP's assigned mission of advancing cooperative enterprises focused on Heart Disease, Cancer, Stroke and Related Diseases (U.S. Public Law 89-239). The initial emphasis of the first approved grants is in the area of heart disease, providing certain services to physicians now inconveniently remote from sophisticated facilities and pilot studies.

The Jacksonville Hospitals Education Program will undertake to develop a model program for statewide use in data collection and evaluation from coronary care units. The University of Florida Health Center will develop educational programs for physicians, nurses and allied health services personnel in providing coronary care affecting some 37 north Florida counties. The Florida Heart Association will organize and design courses for staff nurses and supervisors who will function in coronary care units.

Two programs will build upon computer capabilities. The State Board of Health will extend screening centers and will support computer analysis of EKG tracings taken in cardiovascular screening centers. A long-range plan approved by the Florida Medical Association, the Florida Heart Association and the State Board of Health will include cardiovascular screening in four selected rural counties to attain early recognition of individuals who may be prone to develop heart disease or stroke. Because physicians cannot possibly assume responsibility for screening a population, much work will be done by volunteers and health workers, with medical supervision for individuals referred from the screening centers.

Another promising project in the coronary care field is the computer capability being provided at the University of Florida Health Center, embracing much of the medical community in Alachua County and extending in later stages to 100 miles around Gainesville. It will offer computer readings for physicians which will increase the efficiency of handling electrocardiograms. It also will accomplish the recording of electrocardiographic measurements and provide for storage and prompt retrieval for physician reference as needed.

Another imaginative proposal will set up a prototype for ambulance and other rescue crews. Through the University of Miami and Jackson Memorial Hospital, rescue workers will be provided telemetry equipment, permitting medical personnel to extend remote control supervision of emergency, on-the-scene routines in heart attack cases. It contemplates that procedures will be initiated by non-medical personnel prior to transport of the patients to the hospital.

Of a more general application will be a multiphasic screening project centering in Alachua County and the University of Florida but extending to 14 counties. Its objective is screening of 30,000 persons a year to establish answers to the challenge to detect, early, the indications of many chronic diseases. This program enlisted the support of members of the Alachua County Medical Society.

Dr. Larimore is state director, Florida Regional Medical Program.

Finally, and more immediately concerning the medical profession, is a program of postgraduate education to be presented by the University of Florida Health Center. Physicians also will be invited to serve as visiting faculty members. Time-saving flexibility enables the interested physician to select his field of special interest in adult cardiology, pediatric or cardiac radiology—or all three or any combination.

Other proposals venturing into the areas of cancer and stroke are being developed. None of these has been funded as yet. It is recognized that only a beginning has been made in meeting Florida's problems. There is a vital need to interest individual physicians in presenting ideas, ways of meeting the needs, and perhaps even offering complete proposals. The Florida Regional Medical Program exists to assist in this activity.

Total funding thus far remains comparatively modest: less than $750,000 for the nine operational projects. It is axiomatic that a big dollar sign is not necessarily a measure of the quality of any program. This is particularly true in medicine, where small investments often yield tremendous returns in improved patient care.

▶ Dr. Larimore, 1 Davis Boulevard, Tampa 33606.

Our Mail

More Greetings to Colleagues

Dear Editor:

Here is an addition to the greetings to colleagues.

The wife of a Fort Lauderdale gynecologist writes that when her husband comes home, she hails him with "How are things at the orifice?"

HENRY H. CAFFEE, M.D.
CORAL GABLES

Dear Editor:

This is to add to Dr. Caffee's greetings to colleagues: very cute, I must say.

I have some which might be apropos:

Dermatologist: How's the old skin game?

Ophthalmologist: We see eye to eye.

Otologist: A discussion between a blind man, a deaf man and a dumb man ran like this: "I see," said the blind man. "Be more specific," said the dummy. "I don't believe a word of it," said the deaf man.

MAX M. KULVIN, M.D.
MIAMI

Dear Henry Caffee:

I saw your letter in the Journal.

As a practicing obstetrician how could you have missed this one:

How are things coming out?

R. CHRIS BROWN, M.D.
LARGO

Doctor's Report

Dear Editor:

The following letter was received recently by an insurance company with which I am associated. It is from a rural Iowa GP in response to a request for information about a patient of his who, upon applying for life insurance, gave a history of hypertension.

Mr. ————'s hypertension first appeared in 1965. His highest reading was 190/110 in September of that year. I offer the following equation as perhaps partly responsible:

1. A wife who weighs 280 pounds and misses being 7½ feet tall by two feet. One who tends to amplify every ache and pain beyond belief.
2. A period of financial irresponsibility during which he ran to stay even with debts—now resolved.
3. In-laws—an alcoholic father-in-law who missed the big trip by luck (he died). In Iowa we have four OMVI convictions = one year at Ft. Madison. A mother-in-law who makes Lady Macbeth appear to be a saint. (Both in-laws now deceased).
4. A new job under tremendous pressure in a very exacting industry (plastic manufacturing).
5. A surly son who should have had his butt busted at least three times daily to instill (1) humility and (2) a little parental respect.
6. A fat daughter who is or was starting down the same gastronomic path as her mother.
7. Chronic toothache due to dental caries (now has dentures).

Mr. ————'s pressure is now stable at 124-130/76-89 and has been for one year. No medication is used. The Army has his damned kid and he shall learn who God loves. The girl has a boy friend who has thinned her to people-size and God willing, his wife will either choke to death on an overfeeding or develop diabetes.

I believe I would insure him.

ROBERT E. ZELLNER, M.D.
ORLANDO

Very Minor Procedures

Dear Editor:

Until you get something better, I hereby submit a very nice and especially useful, cheap office article—just a common flat toothpick.

It is useful for taking urethral smears instead of a swab; where the discharge is slight, a swab may absorb all of the material, while a toothpick will produce a satisfactory smear.

With a little cotton applied to the end, it is superior to a cotton swab for cauterizing little lesions with phenol neutralized with alcohol, such as a fever blister (should I say herpes?).

There are other instances when the flat toothpick could be used—in a pinch it could be used for tooth-picking.

LEE W. ELGIN SR., M.D.
MIAMI

Florida Medical meetings

FMA Approved Postgraduate Meetings

JUNE

16-20 Third Annual Workshop in Electrocardiography, Tides Bath Club, St. Petersburg

JULY

3- 6 Twentieth Annual Scientific Assembly, "Human Sexuality and Medical Practice," Jack Tar Hotel, Clearwater

AUGUST

21-23 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Ft. Lauderdale

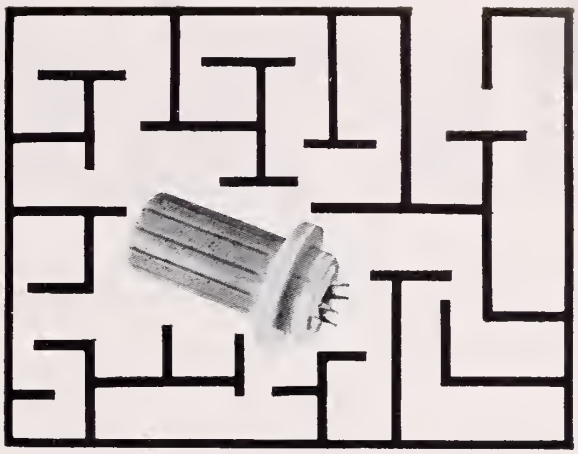
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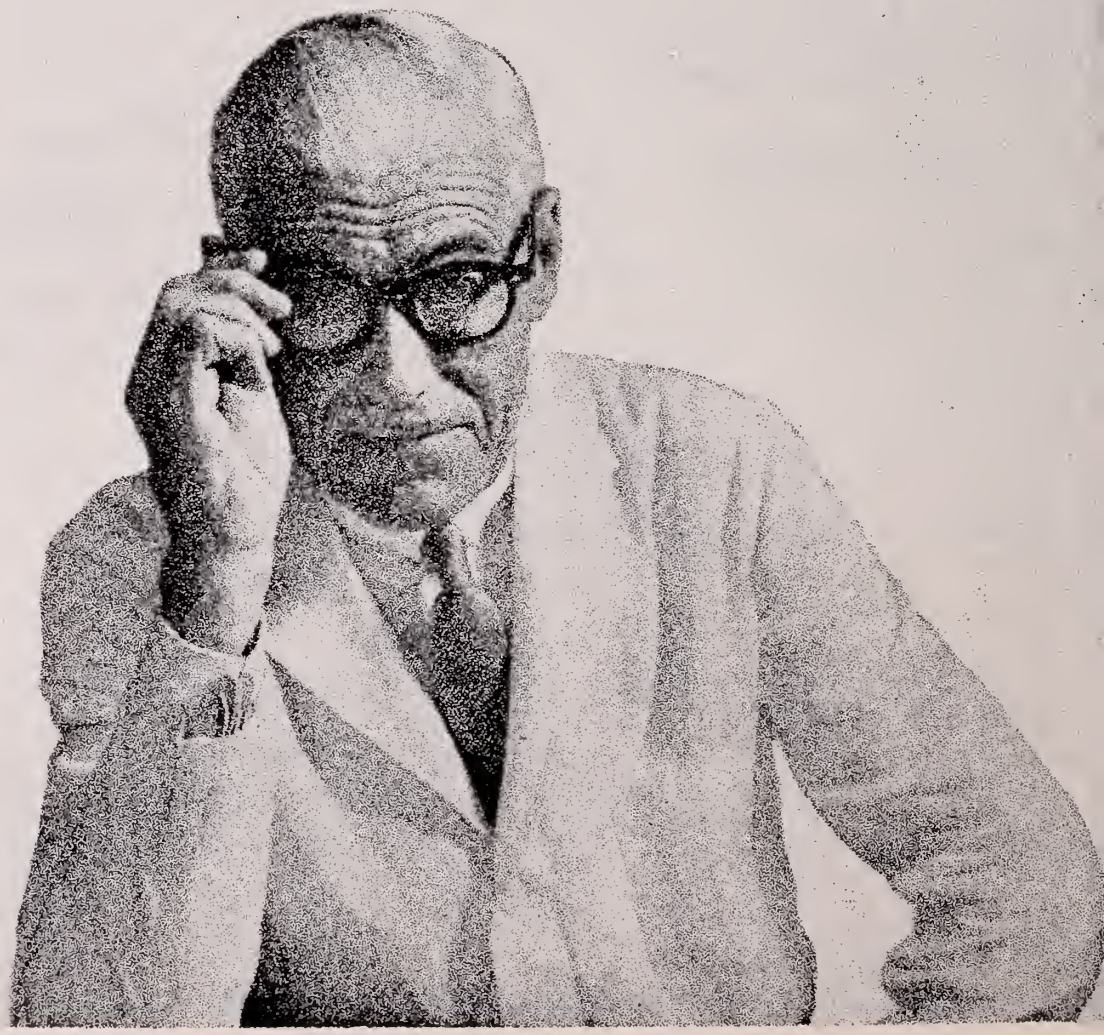
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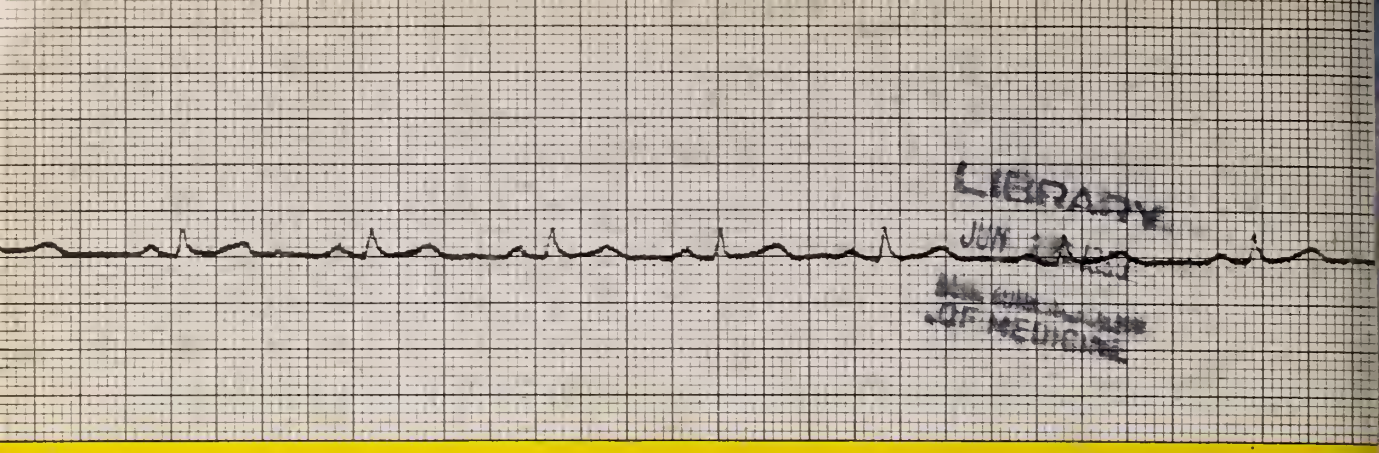
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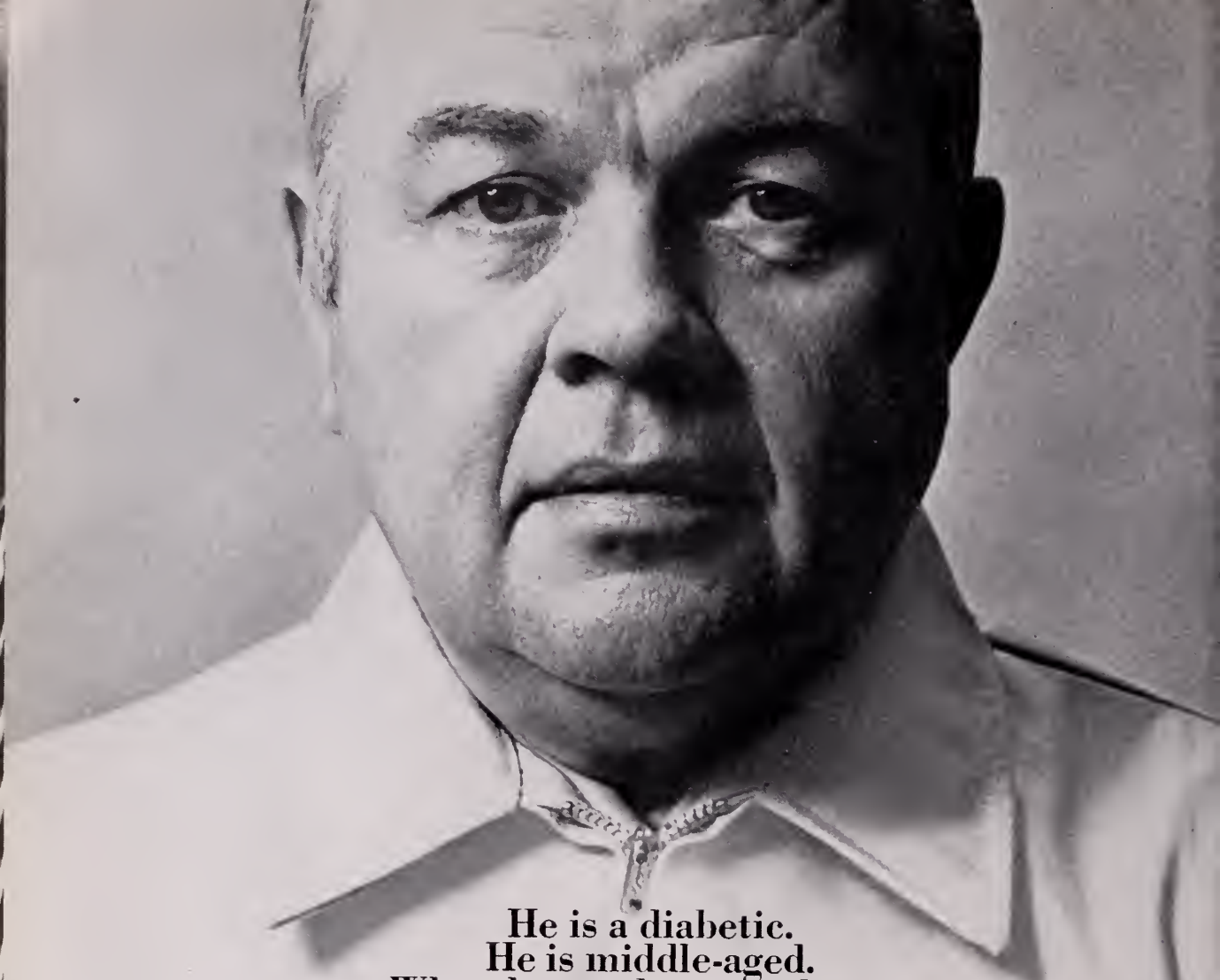
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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur stant observation is essential. If new infections appear, appro measures should be taken. In infants, increased intracranial pr with bulging fontanels has been observed. All signs and symptom disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—macul ular and erythematous rashes: a rare case of exfoliative dermatit been reported. Photosensitivity; onycholysis and discoloration nails (rare). Kidney—rise in BUN, apparently dose related. Tra increase in urinary output, sometimes accompanied by thirst Hypersensitivity reactions—urticaria, angioneurotic edema, anaphy Teeth—dental staining (yellow-brown) in children of mothers give drug during the latter half of pregnancy, and in children given the during the neonatal period, infancy and early childhood. Enamel plasia has been seen in a few children. If adverse reaction or id crasy occurs, discontinue medication and institute appropriate th Demethylchlortetracycline may form a stable calcium complex i bone-forming tissue with no serious harmful effects reported tht in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Shou given 1 hour before or 2 hours after meals, since absorption is imp by the concomitant administration of high calcium content drugs, and some dairy products. Treatment of streptococcal infections s continue for 10 days, even though symptoms have subsided.

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THE JOURNAL OF THE
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JULY, 1969 • VOLUME 56 • NUMBER 7

scientific

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a broad-spectrum antibiotic for the diabetic:

threat or therapy?



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Each capsule contains 250 mg. of tetracycline phosphate complex to control sensitive bacterial pathogens... and nystatin, 250,000 units, as a precautionary measure against troublesome vaginitis, proctitis or other monilial infections. However, superinfection with other, nonsusceptible organisms may occur.

Tetrex-F®

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PRESCRIBING INFORMATION: Tet-F. 5 —2/23/67. For complete information consult Official Package Circular.
Indications: Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections.
Contraindications: The drug is contraindicated in patients hypersensitive to its components.
Warnings: Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood).
Precautions: Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months.
Adverse Reactions: Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur.
Usual Adult Dosage: 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.
Supplied: Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin.

For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles. **A.H.F.S. Category 8:12**

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The burdened heart...

The burdened heart, psychic tension, and adjunctive therapy with Valium® (diazepam):



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Nutley, New Jersey 07110



Artist's conception schematically showing varying ischemic ventricular muscle tissue.

To help lift psychic tension from the already burdened heart

When the cardiac patient shows signs of panic-like reactions following initial diagnosis—a daily regimen of 10-mg Valium (diazepam) tablets *t.i.d.* or *q.i.d.* can help control *severe* psychic tension, anxiety, apprehension and agitation. For *less severe* emotional stress, the 5-mg tablet usually provides the desired calming effect.

When the cardiac patient's outlook impedes convalescence—Valium, as it relieves psychic tension, can help the patient regain a realistic perspective... help him deal more rationally with convalescence by countering excessively anxious attitudes towards the future.

When the cardiac patient can't adjust emotionally to post-recovery limitations—Valium, through its prompt and pronounced calming action on psychic tension, may help avoid exacerbation or aggravation of cardiac symptoms.

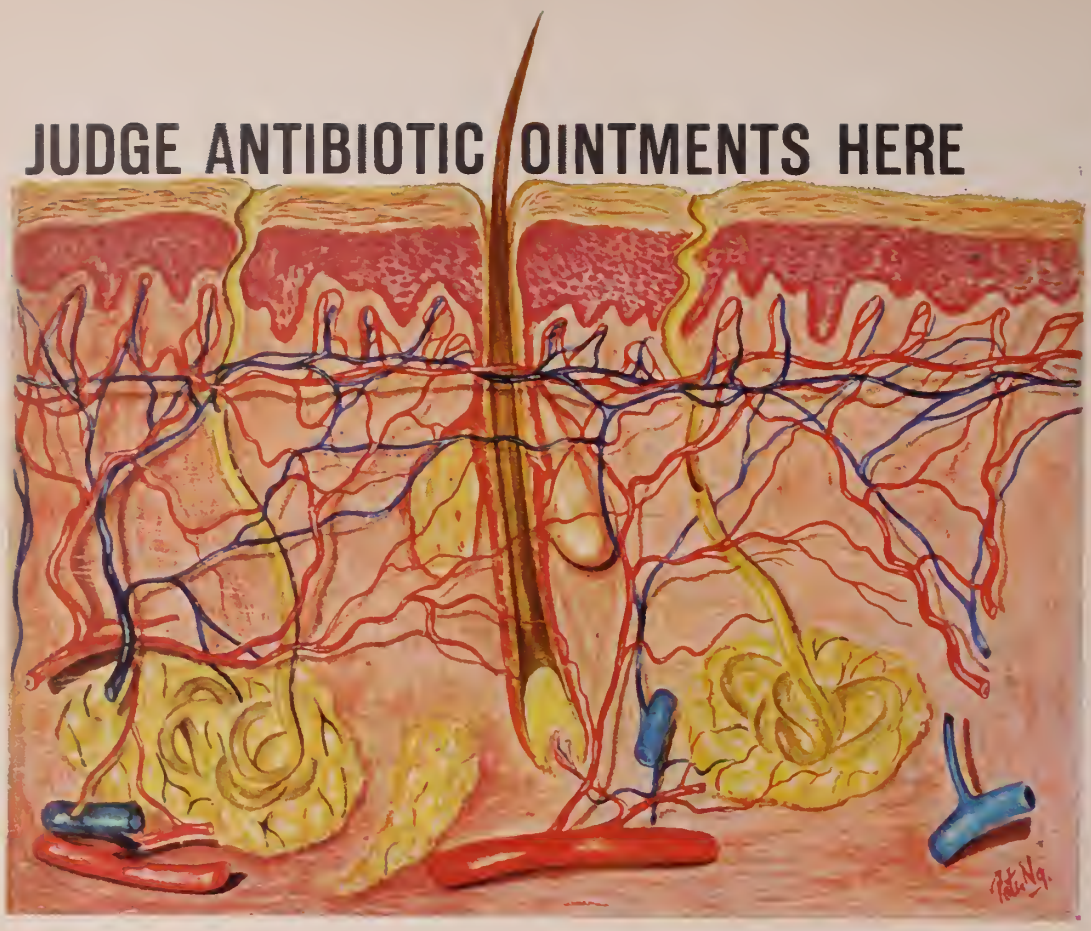
On proper maintenance dosage, Valium seldom dulls the senses or interferes with functioning.

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Valium® (diazepam)

2-mg, 5-mg and 10-mg tablets
t.i.d. and *h.s.*

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Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

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Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

It is a policy of the Journal that authors pay for any cuts used to illustrate their papers.

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JULY COVER

The July cover, "Wind Vane" by Dr. Lyon K. Loomis of Miami, deserves the award it won at the FMA art exhibit.—Ed.

But before you prescribe Pertofrane, please see the full prescribing information and especially note Contraindications, Precautions, Warning, Adverse Reactions and Dosage. A brief summary of that information is included here.

Pertofrane® desipramine hydrochloride

Indications: For relief of depression.
Contraindications: Do not use drugs of the M.A.O.I. class with Pertofrane. Hyperpyretic crises or severe convulsive seizures may occur; potentiation of adverse effects can be serious or even fatal. When substituting this drug in patients receiving an M.A.O.I., allow an interval of at least 7 days. Initial dosage in such patients should be low and increases should be gradual and cautiously prescribed.
Warning: Activation of psychosis may occasionally be observed in schizophrenic patients. Do not use in patients under 12 years old, and do not use in women who are or may become pregnant unless the clinical situation warrants the potential risk.
Precautions: Careful supervision and protective measures for potentially suicidal patients are necessary. Discontinuation of therapy or adjunctive use of a sedative or tranquilizer may be necessary in the presence of increased anxiety or agitation, hypomania or manic excitement. However, phenothiazines may aggravate the condition. Atropine-like effects may be more pronounced (e.g. paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents). Carefully observe patients with increased intraocular pressure. Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications. Cardiovascular complications (myocardial infarction and arrhythmias) are potential risks since they have occasionally occurred with imipramine, the parent compound. Desipramine may block the pharmacologic activity of guanethidine and related adrenergic neuron-blocking agents. Hypertensive episodes have been observed during surgery in patients on desipramine therapy.
Before prescribing the drug, the physician should be thoroughly familiar with prescribing information, with the literature, with all adverse reactions, with the diagnosis and management of depression, and with the relative merits of all measures for treating the condition.
Adverse Reactions: Dry mouth, constipation, disturbed visual accommodation, anorexia, perspiration, insomnia, drowsiness, dizziness, headache, nausea, epigastric distress, and skin rash (including photosensitization) may appear. Since orthostatic hypotension has occurred, carefully observe patients requiring concomitant vasodilating therapy, particularly during the initial phases. Other adverse reactions include tachycardia, changes in EEG patterns, tremor, falling, mild extrapyramidal activity, neuromuscular incoordination, epileptiform seizures. A confusional state (with such symptoms as hallucinations and disorientation) occurs occasionally and may require reduced dosage or discontinuance of therapy. Rarely, transient eosinophilia, slight elevation in transaminase levels, transient jaundice, or liver damage have occurred. If abnormalities occur in liver function tests, discontinue drug and investigate. Occasional hormonal effects, particularly decreased libido or impotence and instances of gynecomastia, galactorrhea and female breast enlargement have been observed. Urinary frequency or retention may occur. The drug should be discontinued if agranulocytosis, bone marrow depression, jaundice, thrombocytopenia, or purpura occur.
Dosage: 25 to 50 mg. t.i.d. The maximum daily dose is 200 mg. Continue maintenance dosage for at least 2 months after obtaining satisfactory response. Generally, elderly and adolescent patients should be given low doses.
Availability: Pink capsules of 25 mg. in bottles of 100 and 1000. (B) 46-530-E

For complete details, please see the prescribing information.

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What makes

A man?
Another woman?
Three kids?
No kids at all?
Wrinkles?
You name it.

Is she truly depressed?

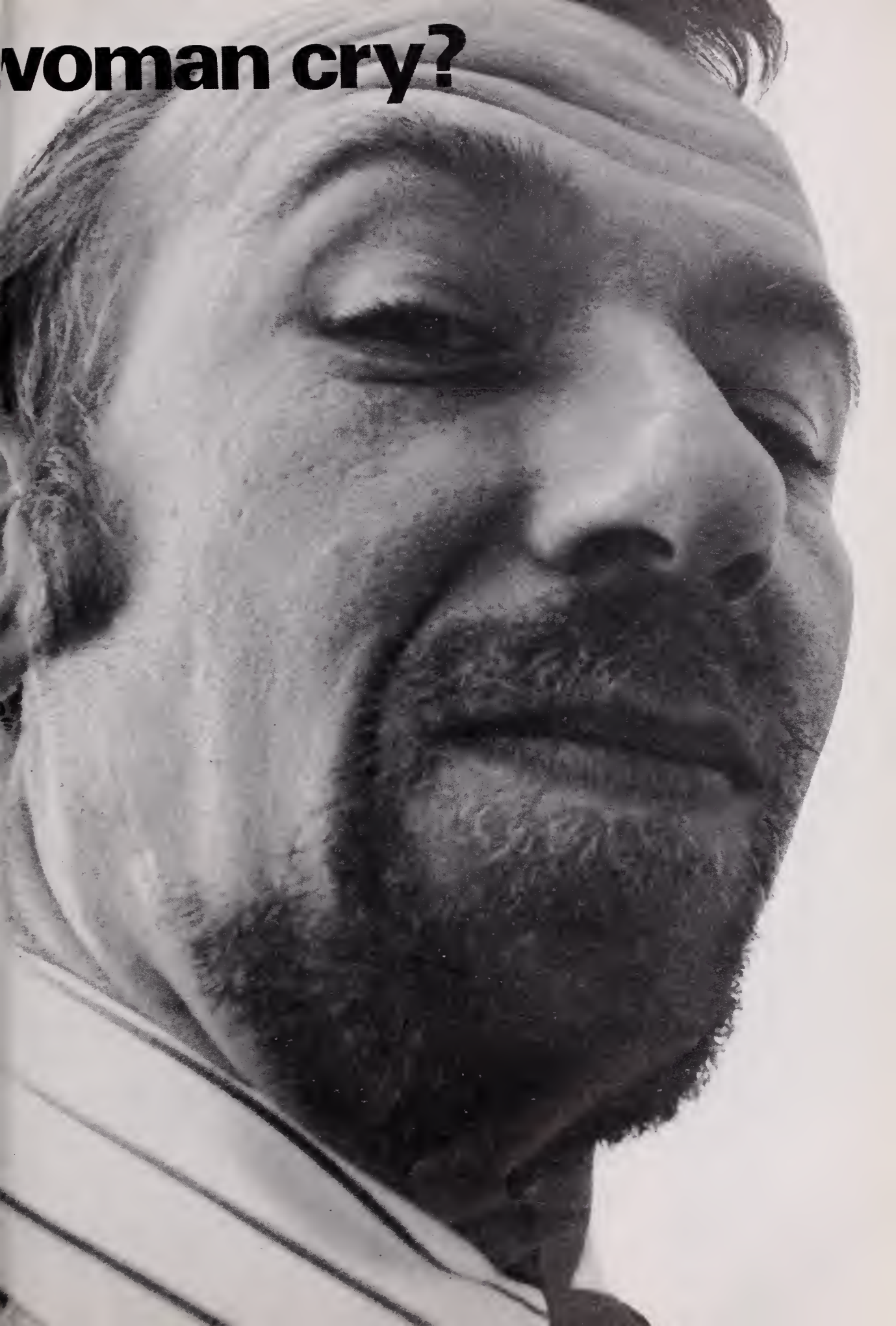
Is that why she lets go in your office?

You comfort her.
Talk to her.
And, if she is depressed consider Pertofrane.
Because
in 3 to 5 days
she can often begin
to cope,
work,
maybe play,
even enjoy.

Pertofrane®

desipramine hydrochlo
In depression...
when words are not enc

voman cry?



A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."* However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A® base.†

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.



*McClarin, W. M., and Knox, J. M.: Cutis 3:619 (June) 1967.

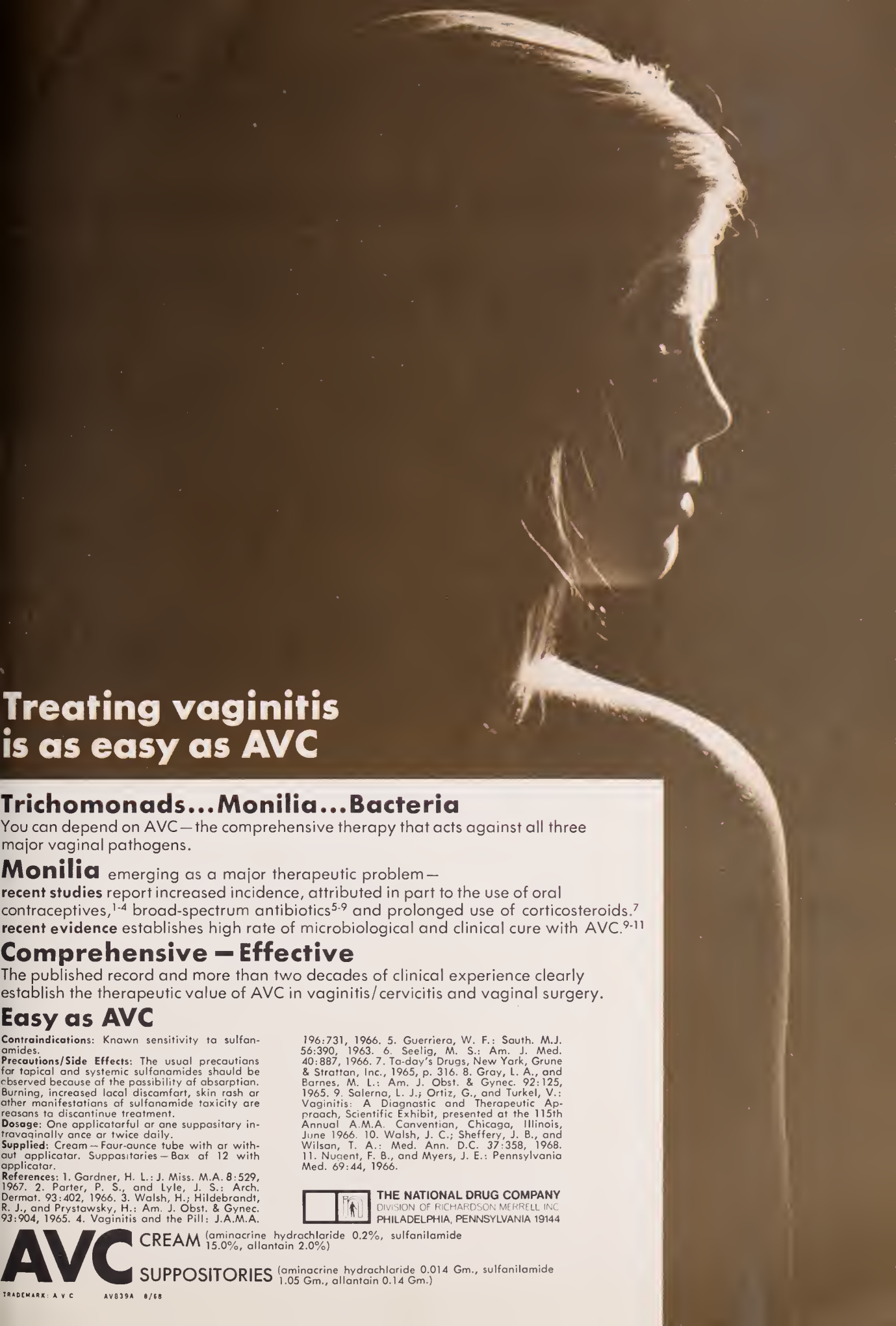
†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

Tinver® Lotion

Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.

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Treating vaginitis is as easy as AVC

Trichomonads...Monilia...Bacteria

You can depend on AVC—the comprehensive therapy that acts against all three major vaginal pathogens.

Monilia emerging as a major therapeutic problem—
recent studies report increased incidence, attributed in part to the use of oral contraceptives,[1-4] broad-spectrum antibiotics[5-9] and prolonged use of corticosteroids.[7]
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Comprehensive — Effective

The published record and more than two decades of clinical experience clearly establish the therapeutic value of AVC in vaginitis/cervicitis and vaginal surgery.

Easy as AVC

Contraindications: Knawn sensitivity ta sulfanamides.
Precautions/Side Effects: The usual precautians far tapical and systemic sulfanamides shauld be abserved because af the passibility af absarptian. Burning, increased lacal discamfart, skin rash ar ather manifestatians af sulfanamide taxicity are reasans ta discantinue treatment.
Dosage: One applicatarful ar ane suppasitary intravaginally ance ar twice daily.
Supplied: Cream—Faur-ounce tube with ar without applicatar. Suppasitaries—Bax af 12 with applicatar.

References: 1. Gardner, H. L.: J. Miss. M.A. 8:529, 1967. 2. Parter, P. S., and Lyle, J. S.: Arch. Dermat. 93:402, 1966. 3. Walsh, H.; Hildebrandt, R. J., and Prystawsky, H.: Am. J. Obst. & Gynec. 93:904, 1965. 4. Vaginitis and the Pill: J.A.M.A. 196:731, 1966. 5. Guerriera, W. F.: Sauth. M.J. 56:390, 1963. 6. Seelig, M. S.: Am. J. Med. 40:887, 1966. 7. Ta-day's Drugs, New Yark, Grune & Strattan, Inc., 1965, p. 316. 8. Gray, L. A., and Barnes, M. L.: Am. J. Obst. & Gynec. 92:125, 1965. 9. Salerna, L. J.; Ortiz, G., and Turkel, V.: Vaginitis: A Diagnastic and Therapeutic Appraach, Scientific Exhibit, presented at the 115th Annual A.M.A. Canventian, Chicaga, Illinois, June 1966. 10. Walsh, J. C.; Sheffery, J. B., and Wilsan, T. A.: Med. Ann. D.C. 37:358, 1968. 11. Nugent, F. B., and Myers, J. E.: Pennsylvania Med. 69:44, 1966.

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TRADEMARK: A V C

AV839A 8/68

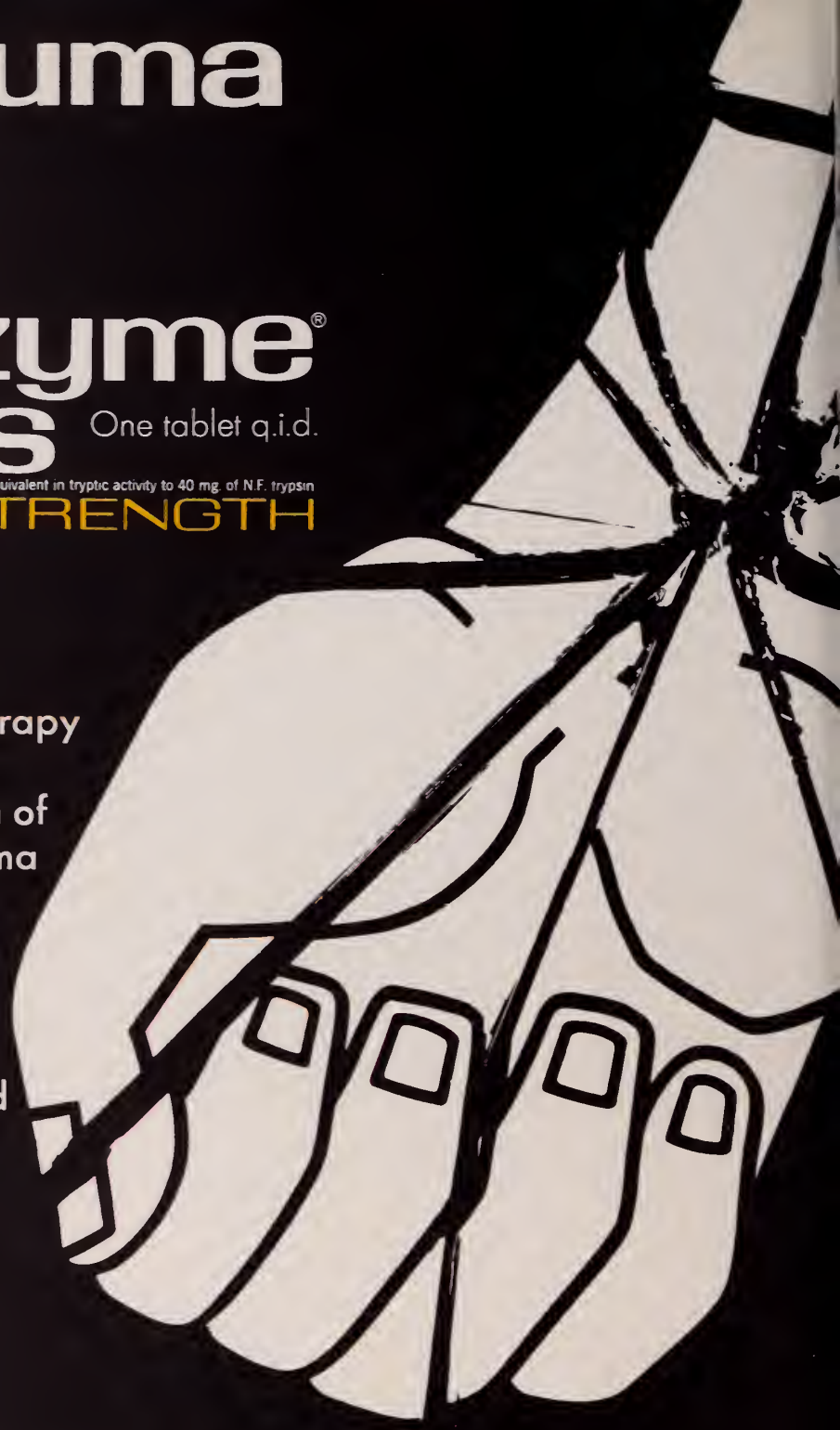
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- ☐ Accidental Trauma
- ☐ Postoperative Tissue Reactions.

Other conventional measures of treatment should be used as indicated. In infection, appropriate anti-infective therapy should be given.

Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.

Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.

Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.

Dosage: One tablet q.i.d.



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TRADEMARK: BITABS U. S. PATENT NO 3,004,893 4/69 0-821A

Design for an ear anti-infective

esigned to act promptly gainst bacterial athogens and pain

Otitis media (when the tympanic membrane is perforated) and otitis externa both espond to the bactericidal action of uracin® (nitrofurazone) in Furacin-HC nitrofurazone-hydrocortisone) Otic. Its road antibacterial spectrum includes ost of the organisms encountered in urface infections (but only certain strains f Pseudomonas). The hydrocortisone omponent in Furacin-HC Otic affords apid relief of painful swelling.

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Designed to please and rotect the patient

opical Furacin-HC Otic lets you reserve ystemic preparations for systemic infections. It rarely irritates inflamed epithelial surfaces, and cross resistance or cross sensitization with antibiotics does not occur. In addition, nonmacerating, odorless Furacin-HC Otic softens wax to facilitate removal of cerumen.

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Precautions: Sensitizatian ta nitrafurazane may accur with pralanged use and is mare likely ta develop in eczematous atitis externa. Ta minimize such reactians (a) limit applicatian ta a week ar less, and (b) avaid use af excessive amaunts which may run dawn the face.

This preparatian is nat indicated far use in treatment af chalesteatama, where surgical interventian is necessary.

Cantraindicatians: The usual cantraindicatians far preparatians containing hydrocartisone should be abserved, such as tuberculaus lesions af skin ar ear, acute herpes simplex, vaccinia and varicella, superficial fungus and yeast infections.

Formula: Furacin®-HC Otic cantains 0.2% Furacin, brand af nitrafurazane, and 1.0% hydracartisane acetate in a water-saluble hygrascapic base af glycerin and palyethylene glycal.

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nitrofurazone / hydrocortisone

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"I'm sick of spinning"



When vertigo began, her life took a turn for the worse.
Either she spins and the room stands still,
or the other way around... and around and around.
Even when she lies down, the spinning
continues. Sometimes there's nausea and vomiting, too.
It's just one thing after another.

You can help stop the spin with

BONINE®

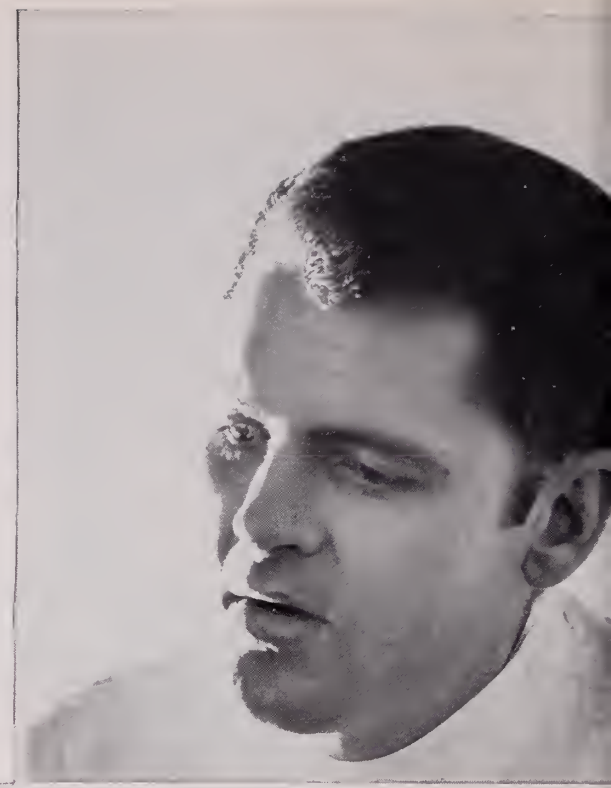
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We Are Growing

At our annual convention in May of this year, we had full discussions of many issues. This was and is healthy as long as we abide by decisions made.

Our Florida Medical Association has always been a "clean" operation. We have just completed our 95th annual meeting and FMA has never been even faintly involved in anything shady or underhanded. All of you know doctors who are active, or have been active, in FMA. I feel sure you will agree that our leadership has always been made up of respected, honorable men of ability and integrity. I would like to emphasize my complete confidence in the leadership of our association. These doctors certainly have the interest of FMA at heart.

Our state and our association are growing rapidly. With our various programs (more than 200 at present) requiring a lot of work, the dissemination of information concerning them is getting more difficult. I hope that through the medium of the JOURNAL we can develop a section for discussion of current items and that we can encourage comments, criticism, and logical development of all points of view on matters of controversy. When this is not always practical maybe we can at least list the time and place for projected committee meetings. This should include the Board of Governors' meetings. This would allow and encourage anyone in FMA with a worthwhile idea to be heard either directly or via his county society leadership. Maybe in this way we can "jell" some of our ideas before our annual convention and thus make our meetings more meaningful. I hope we can publish in the JOURNAL summary reports of committee and council and Board actions. Perhaps we can incorporate the "Briefs" into the JOURNAL to inform you on current affairs in FMA. Please look over the list of "Officers, Councils and Committees for 1969-1970" printed in this issue.

We must streamline our activities at our next convention. We are growing and our problems are getting so numerous that we must make some changes. *Please let us have your ideas* either directly or through your county society. We *must* have our next meeting planned so that everyone can get home on schedule.

If I can pull my rank on Dr. Franz Stewart, Editor of our JOURNAL, I plan on writing later a report giving a broad outline on the workings of FMA including the financial structure.

Henry J. Baker Jr.

Florida Medical | scientific

Vena Cava Umbrella for Prevention of Pulmonary Embolism

Kazi Mobin-Uddin, M.D. and James R. Jude, M.D.

Recurrent pulmonary embolism is best prevented by interruption of the inferior vena cava (IVC). Ligation or plication requires an extensive operation under general anesthesia in an acutely ill patient. An exhibit shown at the 1969 annual meeting of the Florida Medical Association presented a new simple catheter technique for interrupting the IVC by an intracaval device. The procedure is performed under local anesthesia and avoids a major surgical operation.

The intracaval device (Figs. 1-4) is of an umbrella design and consists of six metallic spokes radiating from a central hub and covered on both sides by a heparinized circular thin sheet of silastic. The points extend 2 mm. beyond the silastic. The umbrella is screwed to the threaded end of an obturator and folded within a capsule attached to a cardiac catheter. Intravenous pyelography is performed to determine the level of renal pelvis on each side. The capsule containing the umbrella is inserted via the right internal jugular vein and guided by fluoroscopy to an infrarenal position in the IVC. Upon being ejected from the capsule, the umbrella springs open and fixes in place by its pointed ends penetrating the vein wall. The obturator is unscrewed and it, along with the catheter, is withdrawn. The vein is repaired and the skin closed.

Clinical Application

To prevent recurrent pulmonary emboli, interruption of the inferior vena cava by the cava umbrella has been employed in 35 patients during one year. The diagnosis of pulmonary embolism was confirmed by pulmonary arteriography prior to umbrella implantation. The procedure was performed as an adjunct to heparin therapy for complete protection against pulmonary embolism. Even acutely ill patients with congestive heart failure, cor pulmonale, or chronic obstructive lung disease tolerated the procedure well. Patients in shock from pulmonary embolism treated by emergency caval interruption rapidly improved. Follow-up as long as one year has revealed no further recurrence of pulmonary embolism.

Dr. Uddin, P. O. Box 875, Biscayne Annex, Miami 33152.

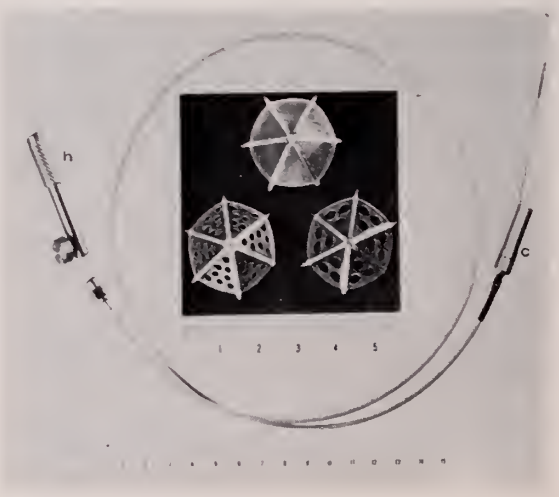


Fig. 1 — Vena cava umbrellas and catheter used for umbrella implantation. Note the non-perforated umbrella is designed for complete occlusion. The sieve type umbrellas have perforations either 1.5 mm. or 3 mm. in diameter.

The capsule "c" attached to the cardiac catheter is 32 mm. in length and 9 mm. in diameter; "h" is the handle fixed to the obturator.

Dr. Mobin-Uddin is assistant professor of surgery, division of thoracic and cardiovascular surgery, and Dr. Jude, professor of surgery and chief, division of thoracic and cardiovascular surgery, University of Miami School of Medicine, Miami.

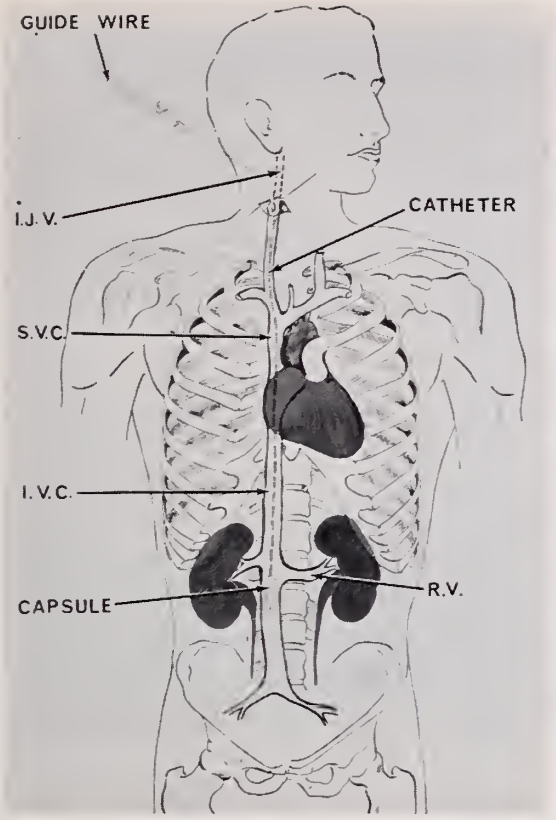


Fig. 2. — The capsule containing the folded umbrella has been inserted via the right internal jugular vein (IJV) and advanced through the superior vena cava (SVC), the right atrium and into the inferior vena cava (IVC), below the renal veins.

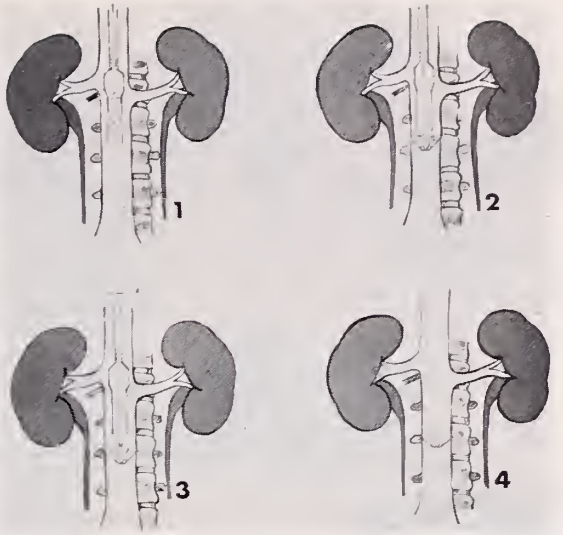
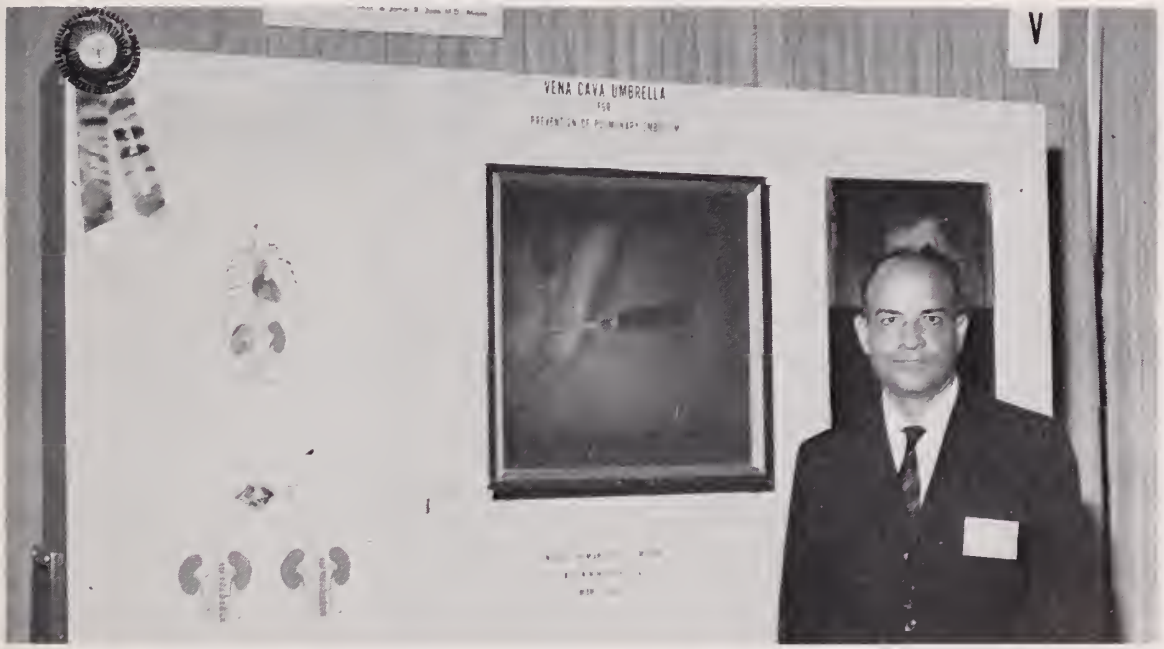


Fig. 3. — 1. Indicates position of the capsule, distal to the renal pelvis in the IVC. 2. The umbrella has been ejected from the capsule. It has sprung open and fixed into place by its points penetrating the vein wall. 3. The obturator has been unscrewed from the umbrella. 4. The catheter has been withdrawn.



Fig. 4. — Note position of the umbrella in the IVC below the renal pelvis.



Dr. Kazi Mobin-Uddin standing in front of his exhibit which won first prize at the 95th Annual Meeting, Florida Medical Association, May 15-18, 1969, Bal Harbour.



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Contraindicated in sulfonamide-sensitive patients, pregnant females at term, premature infants, newborn infants during the first three months of life, glomerular nephritis, severe hepatitis, uremia and pyelonephritis of pregnancy with gastrointestinal disturbances.

Warnings: Use only after critical appraisal in patients with liver damage, renal damage, urinary obstruction or blood dyscrasias. If toxic or hypersensitivity reactions or blood dyscrasias occur, discontinue therapy. In closely intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed.

Precautions: Observe usual sulfonamide therapy precautions including maintenance of an adequate fluid intake. Use with caution in patients with histories of allergies and/or asthma. Patients with impaired renal function should be followed closely since renal impairment may cause excessive drug accumulation. Occasional failures may occur due to resistant microorganisms. Not effective in virus and rickettsial infections.

Adverse Reactions: Headache, nausea, vomiting, urticaria, diarrhea, hepatitis, pancreatitis, blood dyscrasias, neuropathy, drug fever, skin rash, Stevens-Johnson syndrome, injection of the conjunctiva and sclera, petechiae, purpura, hematuria or crystalluria may occur, in which case the dosage should be decreased or the drug withdrawn.

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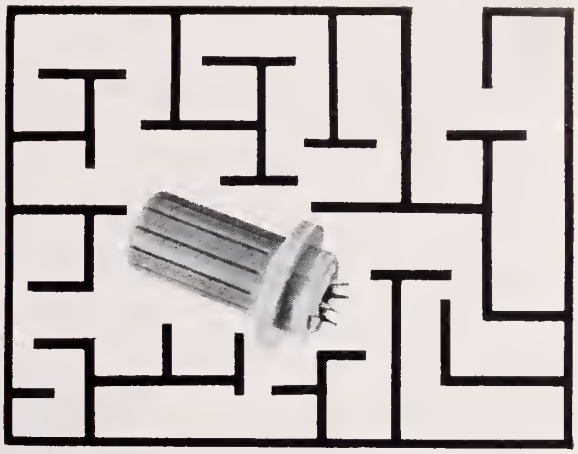
Precautions: Avoid abrupt withdrawal after prolonged , although withdrawal symptoms have not been reported date. Exercise caution in addiction-prone individuals. If nptoms of hypersensitivity occur, discontinue at once initiate appropriate symptomatic treatment. Avoid vities requiring optimal mental alertness if drowsiness vertigo are present. As with any new drug, use cautiously patients with history of drug allergies, blood dyscrasias, hepatic or renal disease; periodic measurements of patic, hematopoietic and renal function should accom- y prolonged and/or high doses.

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PROCEEDINGS

Ninety-Fifth Annual Meeting, Florida Medical Association, Inc., Miami Beach, May 15-18, 1969

President's Address

JACK Q. CLEVELAND, M.D.

"Every great advance in science has issued from a new audacity of imagination."
—John Dewey in
'The Quest for Certainty.'

Some people think of organized medicine as a power structure going on interminably in the same old way and unwilling to change its status quo. This, of course, is not true. Medical care is changing so rapidly that all of us must become more involved or be left behind.

Ten years ago, in 1959, how many of us would have thought that in one short decade we would have color T.V., space exploration, the "Pill," Medicare, commercial jet transportation, heart transplants, and a third party partner in the practice of medicine—the government.

Medical care and its implementation is changing so rapidly that all of us must, of necessity, take a more active part than we have in the past. This is especially true in our hospitals—our workshops. The trend at the moment is for the governing boards to take over the duties of the medical staff. Specifically, this has been done recently in three different hospitals in the state. The medical staffs in these hospitals no longer have anything to say regarding the staff function; their duties and privileges have been abrogated by the governing board. If the governing board is taking over the duties of the medical staff in some areas, it must mean that some of us have not been fully aware of the trend. We must have more interest and concern in what is happening in some hospitals and take a more active part in preventing such abrogation.

This participation begins in your county or component medical society. It is the most im-



Dr. Jack Q. Cleveland delivers his President's Address to the House of Delegates.

portant segment of organized medicine; this is where everything starts. To me, this is the basis of private enterprise in the practice of medicine. Without active component societies, there would not be any need for having state and national medical associations.

Some of the things that are happening in our state and need the help of all of us are:

1. The proper administration and implementation of the Medicaid law which will undoubtedly be passed in this session of the legislature.

2. Full discussion, dialogue and, hopefully, proper decisions regarding the Millis report.

3. Continued efforts to properly administer the Regional Medical Program.

4. Use of every conceivable method and technique to resolve the differences between Florida medicine and the Industrial Commission regarding payment for compensation cases.

5. The reorganization of regulatory boards of the state, if done improperly, will affect the health care of our people. The health services must be administered by health professionals and not by politicians.

6. The osteopathic suit in Dade City against a local hospital affects all of us because the Florida Medical Association is a co-defendant.

7. We must pursue vigorously and improve our more than 200 programs for bringing proper health care to all of the people in Florida.

8. On many occasions since January, I have spoken to you and written in the JOURNAL of the necessity for raising our dues by $25.00 a year. In the report of the Board of Governors in your handbook, many specific reasons are given why your Board believes that to progress, or even continue as in the past, we must have this increase. The request is naturally not pleasant to bring up, but neither would it be pleasant to see our Association go backward.

This has been a most challenging year. I am sure that every President feels that he has worked harder than anyone before him, but I'm equally sure that this is not true—it just seems that way.

I must thank publicly my wife, Evelyn, for her constant help, encouragement and understanding of what I have tried to do. Without her, the job would have been a lot tougher. I also want to thank my partner, George Pullias, who, I'm sure, is glad that my year is over. His willingness to do a lot of my work made it possible for me to take the job. And finally, the year would have been much harder without the constant advice and counsel of Harold Parham. I shall ever be indebted to him and his staff.

I hope that we have used good judgment and good sense in most of our decisions for the Association this year for, as Goethe once said, "Nothing is more terrible than to see ignorance in action."

Thank you for letting me be your President.



President Cleveland presents AMA-ERF checks to medical school deans Frank Moya of University of Miami and Emanuel Suter of University of Florida.

General Session

Abel Seymour Baldwin Memorial Lecture

The General Session of the Ninety-Fifth Annual Meeting of the Florida Medical Association was called to order at 11:00 a.m. on Friday, May 16, 1969 in the Grand Ballroom of the Americana Hotel, Bal Harbour, Florida, by President Jack Q. Cleveland.

Dr. Cleveland made the awards for the best scientific exhibits: first place, "A Vena Caval Umbrella for Prevention of Pulmonary Embolism," Kazi Mobin-Uddin, M.D., George Callard, M.D., Carlos R. Lombardo, M.D. and James R. Jude, M.D., Miami; second place, "Myringoplasty, Tympanoplasty and Mastoidectomy," J. Brown Farrior, M.D., Tampa; third place, "A Self-Locking Femoral Head-Neck Prosthesis with Bipolar Components," Irwin S. Leinbach, M.D., St. Petersburg. Two exhibits received honorable mention, "A System for Modified Pulmonary Function Testing of Routine Hospital Admissions," W. Sam Williams, M.D., Fort Lauderdale, and "Demonstration of Visual Field in Relation to Driving and Safety," John W. Glotfelty, M.D., Lakeland.

A check for $5,299.80 was presented to Dr. Frank Moya, Acting Dean of the University of Miami School of Medicine and a check for $4,155.33 was presented to Dr. Emanuel Suter, Dean of the University of Florida College of Medicine. These were unrestricted funds for the use of the medical schools from the American Medical Association Education and Research Foundation.



Dr. Cleveland presents the first place award for scientific exhibits to Dr. Kazi Mobin-Uddin.



The Honorable Calvin D. Johnson, the President's guest, delivering the Abel Seymour Baldwin Memorial Lecture at the General Session.

Dr. Cleveland then introduced The Honorable Calvin D. Johnson of Upper Marlboro, Maryland, one of America's outstanding contemporary speakers, former Congressman from Illinois, and one of the nation's leaders in the fight for free enterprise and economy in government. The complete text of Mr. Johnson's address on "Opportunities Unlimited" is available on tape for use of the component county medical societies upon request.

Dr. Cleveland thanked Mr. Johnson, said he wished everyone in Florida could have heard this excellent address, and that if Dr. Abel S. Baldwin were alive today, he would very much have enjoyed this speech in his honor.

The general session was adjourned at noon.

First House of Delegates

The House of Delegates of the Florida Medical Association convened at 8:40 a.m. on Thursday, May 15, 1969 in the Grand Ballroom of the Americana Hotel, Bal Harbour, Florida, with Dr. James T. Cook, Speaker of the House, presiding.

The invocation was pronounced by The Reverend Melton Ware, Pastor, First United Methodist Church, Coral Gables.

The Speaker announced the membership of the Credentials Committee: Drs. Joseph C. Von Thron, Chairman, Franklin J. Evans and William W. Thompson.

The chairman of the Credentials Committee, Dr. Von Thron, reported a quorum of 251 delegates present out of a possible 289, which represented a majority of the delegates and a majority of the component county medical societies, and moved that the delegates be seated.

Delegates

ALACHUA—Billy Brashear, Edward G. Byrne, Wilmer J. Coggins, Walter E. Murphree, William C. Ruffin Jr., I. Irving Weintraub.

BAY—John F. Mason Jr., Owen Reese Jr.

BREVARD—John T. Blackburn, Michael J. Foley, Adrian R. Jensen, T. John Kaminski, Laudie E. McHenry Jr., Joseph C. Von Thron (Absent—Donald M. Bryan).

BROWARD—Robert L. Andreae, Robert J. Brennan, Russell B. Carson, Gordon B. Carver, Richard S. Doyle, Arthur L. Eberly Jr., Leonard A. Erdman, Frederick W. Fisher, David C. Lane, John H. Mickley, Ray E. Murphy Jr., Henry D. Perry Jr., Lees M. Schadel, Daniel C. Smith, Robert J. Steinborg, Robert G. Talley, W. Dotson Wells (Absent—Miles J. Bielek, Yale Citrin).

CHARLOTTE—Carl N. Reilly.

CLAY—William A. Mulford.

COLLIER—William J. Bailey, Fred A. Butler.

COLUMBIA—(Absent—Frank E. Adel).

DADE—James L. Anderson, William G. Aten Jr., David J. Becker, Jerome Benson, Morris H. Blau, Rufus K. Broadaway, Harvey E. Brown Jr., Sol Center, Richard C. Clay, Francis N. Cooke, Edward W. Cullipher, DeWitt C. Daughtry, Richard C. Dever, Robert F. Dickey, J. Lee Dockery, L. Washington Dowlen, Franklin J. Evans, Richard M. Fleming, M. Eugene Flipse, Milton S. Goldman, Marshall F. Hall, Henry C. Hardin Jr., Jim C. Hirschman, Caroline B. Hunter, E. Douglas Hutson, James J. Hutson, Paul S. Jarrett. James R. Jude, Matthew A. Larkin, John B. Liebler, Joseph Lomax, Ronald J. Mann, Paul W. Mayer, James H. Mendel Jr., William T. Mixson Jr., Elwin G. Neal, Jean Jones Perdue, Edwin P. Preston, Walter Sackett Jr., M. Murray Schechter, Daniel L. Seckinger II, Everett Shocket, Thomas W. Skaggs, Gilbert B. Snyder, William R. Stinger, Mario M. Stone, William M. Straight, Charles F. Tate Jr., Maynard F. Taylor, William B. Welch, Arthur W. Wood Jr., Scheffel H. Wright (Absent—Julius Alexander, Thomas J. Baker, Clinton L. Border Jr., Chester Cassell, Vincent P. Corso, Joseph H. Davis, Maurice M. Greenfield, Morton M. Halpern, Benedict R. Harrow).

DeSOTO-HARDEE-GLADES—Calvin W. Martin.

DUVAL—Samuel J. Alford Jr., Robert J. Brown, Clyde M. Collins, Ensor R. Dunsford, Thomas S. Edwards, John J. Fisher, Karl B. Hanson, Forrest M. Haswell, Mackenzie A. Manson, Charles B. McIntosh, Thad Moseley, Harry W. Reinstine Jr., C. Burling Roesch, Wilbur C. Sumner, William A. Van Nortwick, James W. Walker, Albert H. Wilkinson Jr., Jonathan H. Wood.

ESCAMBIA—Reed Bell, Theodore J. Marshall, Julian O. Olsen Jr., Lockland V. Tyler Jr., Earl G. Wolf (Absent—Charles J. Kahn).

FRANKLIN-GULF—Joseph P. Hendrix.

GADSDEN-LIBERTY—James B. O'Connor.

HIGHLANDS—Donald C. Hartwell.

HILLSBOROUGH—Richard H. Blank, Harold D. Brewer, Francis C. Coleman, Richard G. Connar, John C. Fletcher, James M. Ingram, Victor H. Knight, Eugene B. Maxwell, W. Mahon Myers, Charles L. Pope, William W. Trice Jr., Harold L. Williamson (Absent—Louis E. Cimino, Richard S. Hodes, James A. Winslow).

INDIAN RIVER—Charles C. Flood.

JACKSON-CALHOUN—William F. Brunner.

LAKE—Bergon F. Brokaw, J. Basil Hall.

LEE-HENDRY—Fred J. Burford, Wallace M. Graves Jr., Edward W. Salko.

LEON-WAKULLA-JEFFERSON—Edward G. Haskell Jr., Nelson H. Kraeft, Stuart C. Smith, Robert N. Webster.

MANATEE—John L. Knowles, Roger Meyer, Joseph F. Newhall Jr.

MARION—Henry L. Harrell (Absent—Alexander Goulard Jr.).

MONROE—Joseph L. Lester Jr.

NASSAU—(Absent—J. B. Britton).

OKALOOSA—Eugene R. Celano, William W. Thompson.

ORANGE—Benjamin M. Cole, Norman F. Coulter, Francis M. Coy, Robert W. Curry, Truett H. Frazier, Howard B. Goodrich, Paul C. Harding, Harold W. Johnston, Franklin B. McKechnie, Louis C. Murray, Franklin G. Norris, Charles R. Sias, Edward W. Stoner, Miles W. Thomley.

PALM BEACH—Willard F. Ande, Carl E. Andrews, Vernon B. Astler, James R. Brandon, M. A. Crispin, Joseph C. Doane, Tscheng S. Feng, James R. Forlaw, Russell D. D. Hoover, Bernard Kimmel, Nicholas S. Petkas, H. John Richmond, Harold A. Yount.

PASCO-HERNANDO-CITRUS—William H. Hubbard, W. R. Jenkins.

PINELLAS—David K. Davis, Joseph A. Ezzo, Douglas W. Hood, David S. Hubbell, Charles A. Johnson, John T. Karaphillis, Charles H. Lasley, Jack A. MaCris, Donald G. Nikolaus, Thomas M. Quehl, Frederick O. Smith, James M. Stem, Richard C. Trump, Abbott Y. Wilcox Jr., Walter H. Winchester, Rowland E. Wood.

POLK—James R. Boulware III, J. Gerard Converse, Howard M. DuBose, Spencer R. Garrett, John W. Glotfelty, Marion W. Hester, Willard E. Manry Jr., Arthur J. Moseley Jr.

PUTNAM—Fairfax E. Montague.

ST. JOHNS—William W. O'Connell.

ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.

SANTA ROSA—(Absent—Joseph M. Bosworth).

SARASOTA—Irving A. Beychok, John O. Binns III, John M. Butcher, Samuel E. Kaplan, Franklin H. Pfeiffenberger, Karl R. Rolls.
SEMINOLE—Fred Ionata, Luis Perez.
SUWANNEE-HAMILTON-LAFAYETTE — (Absent—Wilton R. Kane).
TAYLOR—James A. Rawls Jr.
VOLUSIA—Thomas D. Cook, C. Robert DeArmas, Charles L. Rickerd, Robert L. Stevenson (Absent—Harry G. Gillis).
WALTON—(Absent—Edgar H. Myers).
COUNCIL ON SPECIALTY MEDICINE—Fred C. Andrews, James D. Beeson, West Bitzer, Jack H. Bowen, Andre S. Capi, James W. Clower Jr., Emmet F. Ferguson Jr., Joseph G. Matthews, Sanford A. Mullen, Curtis G. Rorebeck, Richard G. Skinner Jr., Edward J. Sullivan Jr. (Absent—Samuel G. Hibbs, Bernard L. N. Morgan, Robert E. Raborn).
DELEGATES TO AMA—Jere W. Annis, Reuben B. Chrisman Jr., Burns A. Dobbins Jr., Francis T. Holland, Robert E. Zellner.
PAST PRESIDENT AMA—Edward R. Annis.
OFFICERS—Henry J. Babers Jr., Jack Q. Cleveland, James T. Cook, Charles K. Donegan, Irving E. Hall Jr., Floyd K. Hurt, W. Dean Steward.
BOARD OF PAST PRESIDENTS—Jere W. Annis, Samuel M. Day, H. Phillip Hampton, Ralph W. Jack, Edward Jelks, Walter C. Jones, Francis H. Langley, John D. Milton, George S. Palmer, Warren W. Quillian, William C. Roberts, W. Dean Steward, Joseph S. Stewart, Leo M. Wachtel, Robert E. Zellner (Absent—Orion O. Feaster, Frederick K. Herpel, Duncan T. McEwan, Robert B. McIver, Walter C. Payne Sr., Eugene G. Peek Sr., William M. Rowlett, William C. Thomas Sr.).

Motion was carried to adopt the Rules and Order of Business of the House as follows:

Information For Delegates

The Rules and Order of Business for the House of Delegates is included in this Handbook.

Delegates and alternates whose names appear in this Handbook have been certified by their county medical societies. Our By-laws do not permit an alternate to serve for a delegate who has once been seated. The By-laws require that delegates fill out attendance cards at each meeting of the House of Delegates in order to be credited in attendance, and further, the Chairman of the Credentials Committee is required to report to the House the number of delegates who have registered their attendance cards, thus eliminating the necessity of a roll call to seat delegates.

Reports and resolutions that were received before going to press are included in this Handbook. Delegates are urged to study them carefully before they are introduced in the House. Whenever possible, it is requested that Resolutions and supplemental reports be forwarded to the Association's executive office by April 30 for duplication and distribution to the delegates.

All reports and resolutions will be referred to Reference Committees by the Speaker at the First Meeting of the House of Delegates. All members who are interested in any committee report or resolution are invited to attend the Reference Committee meetings where a full discussion will take place. Council and committee chairmen are respectfully requested to be present and discuss their respective reports. All members of Reference Committees are urged to study carefully the reports and resolutions referred to them. The chief purpose of the Reference Committees is to allow an opportunity for as many members of the Florida Medical Association as possible to appear and be heard and thus have a voice in the business of the Association. In addition, discussions before the Reference Committees have the added advantage of avoiding long discussions at the meetings of the House of Delegates. Members may request the Reference Committee chairman to defer items in which they are interested in order that they may be present to discuss the subject.

A resolution before the Reference Committee should have a sponsor present before the Reference Committee. All resolutions must be filed by 6:00 p.m. on the day preceding the First Meeting of the House of Delegates. Your attention is called to the format of the annual meeting, where the Reference Committee meetings will be held in the afternoon following the First Meeting of the House. We also plan to have all Reference Committee reports duplicated and available to the delegates at the Registration Desk the day preceding the Second Meeting of the House of Delegates. We trust these provisions will result in an efficient and informed House of Delegates.

According to our By-laws, nomination and seconding speeches shall be limited to a maximum of two minutes each. If additional information needs to be presented to the House, it should be duplicated and distributed to members of the House.

Your Speaker and Vice-Speaker are available at any time to help in any way in the preparation of resolutions or in any capacity in which they might help any member of the Florida Medical Association.

James T. Cook,
Speaker, House of Delegates
Charles K. Donegan,
Vice-Speaker, House of Delegates

Motion was carried to approve the minutes of the last meeting as published in the July 1968 issue of the JOURNAL.

The Speaker introduced the officers of the Association: Drs. Jack Q. Cleveland, President; Henry J. Babers Jr., President-Elect; W. Dean Steward, Immediate Past President; Irving E. Hall Jr., Vice President; Charles K. Donegan, Vice Speaker of the House; Floyd K. Hurt, Secretary-Treasurer, and Mr. W. Harold Parham, Executive Director.

The Speaker then instructed the House.

Remarks of the Speaker

Year by year we have tried to expedite the business of this House. You will notice a few improvements, mostly applicable to our second session. Each year the Vice Speaker and I have attended a meeting of the Speakers of the House of the Southeastern States which is well attended. The Speaker and Vice Speaker of the American Medical Association have also been there. Comparing our business with those of other Houses, which we have an opportunity to do there, I think our meetings are better organized than those of most states, mainly due to the efficiency of my predecessors as speaker and to Mr. Parham. We picked up a few ideas; for instance, this year our Reference Committee reports are color-coded and we have numbered the paragraphs in the Handbook for easier reference.

I believe the most valid criticism that was made of our last meeting was the inefficient way that the vote was tabulated on close questions when other than a voice vote was required. Frankly, despite the prepossessing appearance of our individual delegates, when you all stand up and we try to count you, it is like trying to count a can of worms. This year we have a better solution and we will see how it works Sunday.

Let me urge each delegate to conscientiously attend the Reference Committee meetings. Further, carefully study the reports of the committees prior to the Sunday session. This is your duty and should help to make the Sunday session shorter.

The Board of Governors has already moved everything from Sunday to Thursday that could possibly be moved. I can think of no other way to shorten the Sunday session and at the same time let every delegate have his legitimate say before the House when he so desires.

One other thing—help those who help us. Visit the exhibits. They are an integral part of our annual meeting.

The Speaker called attention to several minor errors in the Handbook.

The next item of business required explanation. The Speaker asked the delegates to refer to page 45, paragraph 4 of the Handbook which was a By-Law amendment to Chapter XIV, Section 1. The existing By-Law required that an amendment lay on the table for one day after being acted upon by the Reference Committee, and this is impossible with the present meeting schedule. In order to comply with this rule, the House of Delegates would recess briefly and the Reference Committee would meet during this first session of the House, so that the report could lay on the table for at least one day before being acted upon in the House of Delegates on Sunday.

Motion was carried that the House of Delegates recess, and that it reconvene as a "committee of the whole" with chairman of Reference Committee No. 3, Dr. Edward W. Cullipher, presiding.

The members of Reference Committee No. 3 who were present came to the platform: Drs. Edward W. Cullipher, Chairman, Abbott Y. Wilcox Jr., Nelzon Zivitz and James R. Forlaw. Dr. William C. Roberts was not present.

The Chairman, Dr. Cullipher, called Reference Committee No. 3 into session and remarked that he was honored to have so many turn out for his meeting.

Dr. David S. Hubbell, Pinellas: "Does this amendment mean that this is the only way the By-Laws can be amended; that is, going through the Board of Governors, or can procedures be instituted for amending the By-Laws by the House of Delegates?"

Dr. Cook explained that as the proposed By-Law is written, amendments would have to first be screened by the Board of Governors. It was thought that this should be done because before a By-Law change is made it should really be screened by legal counsel. He further explained, however, that this could be changed later if found unsatisfactory.

The Reference Committee went into executive session to formulate its recommendations.

The Speaker reconvened the House of Delegates.

Dr. Cullipher, Chairman, Reference Committee No. 3, recommended the adoption of By-Law Amendment: "Chapter XIV, Section 1. THESE BY-LAWS MAY BE AMENDED BY FIRST BEING CONSIDERED BY THE BOARD OF GOVERNORS, AND THE REPORT OF THE BOARD OF GOVERNORS SHALL BE SUBMITTED TO THE HOUSE OF DELEGATES AND THE APPROPRIATE REFERENCE COMMITTEE. AFTER THE REPORT OF THE REFERENCE COMMITTEE, IT SHALL REQUIRE A MAJORITY VOTE OF THE DELEGATES SEATED TO PASS SUCH AN AMENDMENT."

The Speaker announced that this recommendation would lay on the table until the second meeting of the House on Sunday.

Distinguished guests were then introduced: Mrs. Linus W. Hewit, President of the Woman's Auxiliary to the Florida Medical Association; Mrs. Charles H. Gilliland, President-Elect of the Woman's Auxiliary; and Mrs. John M. Chenault, President, Woman's Auxiliary to the American Medical Association.

Mrs. Hewit greeted the House of Delegates on behalf of the Auxiliary and reported that this year with the theme, "Happiness Is—Serving Others," with emphasis on Safety for Children and Youth, the Woman's Auxiliary's efforts had been directed toward making the communities in Florida better places for the doctors to work and for their patients and families to live. The component societies of the Auxiliary have worked on teen-age health problems, presenting programs on drug abuse, alcoholism and sex education. Many have worked hand-in-hand with doctors' groups, launching courses in public schools and combining this with programs emphasizing safety of children on the highways, waterways and in the home.

Joining in a campaign started by AMA Auxiliary President, the late Mrs. C. C. Long, the Florida Auxiliary sent letters to leaders of the television and motion picture industries, protesting the type of programs being presented, and encouraged other women's groups to join in this effort. So successful was this campaign that an investigation is now being conducted by the United States Senate.

Mrs. Hewit mentioned other accomplishments and programs of the Woman's Auxiliary—joining with other groups to form the Florida Health Manpower Council; sponsoring 138 paramedical clubs in high schools with 3,500 student members; raising $12,500 for AMA-ERF; acting as hostesses for the AMA Clinical Session and presenting four shows on closed circuit television.

Mrs. Hewit continued by saying that the Auxiliary does the things in the communities that the doctors do not have time to do and thus create good public relations for the doctors. In

closing she said, "Our happiness is—being your Auxiliary."

The Speaker introduced Mr. Harry T. Gray, the Association's legal counsel.

Mr. Mark Hulsey, President of The Florida Bar, brought greetings from the 11,240 lawyers in Florida, along with the comforting news that lawyers are being sued more and more for malpractice.

The main theme of his talk was the present change and turmoil in America today—the "Establishment," what it is, and its attackers. He described the organization of The Florida Bar, its governing body, its principal program of ethics and discipline, and prevention of the unauthorized practice of law.

He then described the nationwide systematic conspiracy of Students for a Democratic Society and other destructive groups to discard the existing social order without offering any constructive plan to replace it.

He called upon the doctors to become active and use their influence in solving today's social problems.

In closing he said: "Achieving the ideal of justice and equality is the highest goal of humanity. America has come closer to that ideal than ever before in the history of man. But our ideal is threatened. Thomas Paine wrote: 'Those who expect to reap the blessings of freedom must, like men, undergo the fatigue of supporting it.' So, I say to you: ESTABLISHMENT ARISE!"

Dr. Cook introduced his wife, Lillian; his daughter-in-law, Nancy, and his son, James T. Cook III, who is a senior medical student.

The President, Dr. Jack Q. Cleveland, took the Chair. He presented the A. H. Robins Company Annual Award for Outstanding Community Service by a Physician to Dr. Ben J. Sheppard. Dr. Sheppard was escorted to the podium by Drs. Rufus Broadaway and Richard Fleming.

A. H. Robins Company Award
"For Outstanding Community Service by a Physician"

Ben J. Sheppard, M.D., of Miami is the recipient of the 1969 Community Service Award of the A. H. Robins Company. Annually this signal honor is accorded a member of the Florida Medical Association who has rendered distinguished service in civic and community activities. The Association's Board of Governors makes the choice from candidates nominated by the component medical societies.

Dr. Sheppard was born in New York City in 1902. He received his premedical training from Long Island College in 1928 and received a Doctor of Medicine degree from State University of New York, Downstate Medical Center, in 1933. Specializing in pediatrics, Dr. Sheppard practiced in New York until moving to Florida in 1947.

A man of many accomplishments, Dr. Sheppard has exhibited a special concern for the problems of children and adolescents. He is a member of the Dade County Youth Commission, President of the Dade County Juvenile Council, a voluntary physician to the Youth Hall facilities attached to the Court, a member of the President's Committee on Juvenile Delinquency and Youth Crime, a member of the Dade County Medical Association Committee on Juvenile Delinquency, a member of the board of St. Joseph Villas (orphanage) and a staff consultant to the polio committee of Variety Children's Hospital. In addition, Dr. Sheppard has served on the boards of the Children's Center for emotionally disturbed, Big Brothers and the Dade County Association for the Mentally Retarded.

In addition to his many medical achievements, Dr. Sheppard decided to study law at night, receiving his degree from the University of Miami Law School in 1952. He taught medical jurisprudence at the University of Miami from 1952 to 1958, was county medical examiner from 1952 to 1956 and was president of The Florida Bar Association's Medicolegal Committee. In 1960, he was elected judge of the Dade County Juvenile and Domestic Relations Court, holding this post until 1966.

His many other interests include adolescent and family counseling, the American Board of Legal Medicine, the Catholic Welfare Bureau, the Coral Gables Reading Academy and the Fine Arts School. In recognition of his many accomplishments, Dr. Sheppard is the recipient of the Sertoma Club's "Man of the Year" award, the "Good Samaritan" award from the Variety Children's Hospital, and has received awards from the YMCA, Civitans, Hadassah, Arthur Dozier's Children's Center, the Florida Juvenile Officers, and Big Brothers. Dr. Sheppard is a truly outstanding gentleman.

The House gave Dr. Sheppard a standing ovation.

Dr. Sheppard: "I want to thank the Florida Medical Association Board of Governors and my own county medical association for selecting my name. I am deeply honored by this award."

Dr. Cook resumed the Chair and introduced the President, Dr. Jack Q. Cleveland.



Dr. Cleveland presents the A. H. Robins Company Award to Dr. Ben J. Sheppard.

Dr. Cleveland presented the members of his family who were present, his wife, Evelyn; his daughter, Lynn, who will graduate from Emory University in three weeks; her husband, William Worth Culbertson IV, who is a junior medical student at Emory.

Dr. Cleveland then presented his annual address. (The complete text of President Cleveland's address begins on page 483).

The Vice Speaker took the Chair and announced the personnel of Reference Committees and time and place of their meeting.

I. Health and Education
   Joseph S. Stewart, *Chm.*
   Billy Brashear
   John W. Glotfelty
   Miles W. Thomley
   Stuart C. Smith

II. Public Policy
   Louis C. Murray, *Chm.*
   Robert J. Brown
   Eugene B. Maxwell
   Richard C. Clay
   John M. Butcher

III. Finance and Administration
   Edward W. Cullipher, *Chm.*
   William C. Roberts
   Abbott Y. Wilcox Jr.
   James R. Forlaw
   Nelson Zivitz

IV. Legislation and Miscellaneous
   Reed Bell, *Chm.*
   Francis C. Coleman
   David C. Lane
   Joseph H. Davis
   Wilbur C. Sumner

V. Medical Economics
   Russell B. Carson, *Chm.*
   William W. O'Connell
   John T. Karaphillis
   Laudie E. McHenry Jr.
   Rufus K. Broadaway

Meetings:

I.	2:30 p.m.	Health and Education Westward Room No. 1
II.	2:30 p.m.	Public Policy Westward Room No. 2
III.	2:30 p.m.	Finance and Administration Westward Room No. 3
IV.	2:30 p.m.	Legislation and Miscellaneous Westward Room No. 4
V.	2:30 p.m.	Medical Economics Westward Room No. 5

The Vice Speaker then called attention to two resolutions which had been received too late for the Handbook or for the packets, which had been duplicated and passed out that morning:

Resolution 69-32, Health Education, to Reference Committee No. IV.

Resolution 69-33, Medical Principles of Medical Ethics and the Crisis at Medical Center Hospital, Punta Gorda, Florida to Reference Committee No. III.

Supplemental reports were called for and the Chair recognized Dr. William M. Straight, Chairman, Committee on Archives.

Dr. Straight asked those members who joined the Florida Medical Association in 1938 and 1939 to stand and be recognized.

Dr. Straight then asked for reverent contemplation of those colleagues who during the past year have left for the life hereafter. He called attention to the list of names in the delegates' packets and the two beautiful vases of red roses on the podium which were placed there in memory of the departed friends. He said that these men had served their patients and communities in life and they really had not died, because to live in the hearts of those they left behind is not to die.

The House stood for a moment of silent contemplation in memory of their departed colleagues.

Dr. Straight's report was referred to Reference Committee No. III.

The supplemental report of the Judicial Council was referred to Reference Committee No. III.

The supplemental report of the Board of Governors was referred to Reference Committee No. III.

Dr. Sanford Mullen, Chairman, Committee on State Legislation, gave a brief oral report on the status of various bills in which the Association members were interested. He said that he would appear before Reference Committee No. IV to give the members any information they might need.

The President, Dr. Cleveland, asked for the floor. He complimented Dr. Edward G. Haskell Jr., former chairman of the Committee on State Legislation, on the fine job he had done in Tallahassee and thanked him for all the time and effort he had spent in behalf of medical legislation. He announced that Dr. Haskell had resigned for personal reasons and that Dr. Mullen had agreed to take this appointment.

Dr. Quehl called attention to Resolution 69-28 which had been assigned to Reference Committee No. III in error, and suggested that it would more probably fall under Committee No. IV. The Speaker agreed and so gave this resolution to Committee No. IV.

By unanimous consent of the House, Dr. Walter W. Sackett presented Resolution No. 69-34, Narcotics Clinics under State Board of Health, which was referred to Reference Committee No. IV.

The Speaker announced the General Session to be held at 11:00 a.m. on Friday, May 16, with the President's Guest Speaker, Mr. Calvin D. Johnson, the Blue Shield meeting and the FLAMPAC luncheon.

The House of Delegates recessed at 9:55 a.m. to reconvene on Sunday, May 18, 1969 at 8:30 a.m.

Second House of Delegates

The second meeting of the House of Delegates convened at 8:50 a.m. on Sunday, May 18, 1969 in the Bal Masque Room of the Americana Hotel, Bal Harbour, with Dr. James T. Cook, Speaker of the House, presiding.

Dr. William W. Thompson, acting for Dr. Joseph C. Von Thron, Chairman of the Credentials Committee, reported 254 delegates registered which represented a quorum and a majority of the county medical societies and moved that they be seated.

Motion was seconded and carried.

Delegates

ALACHUA—Billy Brashear, Edward G. Byrne, Wilmer J. Coggins, Walter E. Murphree, William C. Ruffin Jr., I. Irving Weintraub.

BAY—John F. Mason Jr., Owen Reese Jr.

BREVARD—Michael J. Foley, Adrian R. Jensen, T. John Kaminski, Laudie E. McHenry Jr. (Absent—John T. Blackburn, Joseph C. Von Thron, Donald M. Bryan).

BROWARD—Robert L. Andreae, Robert J. Brennan, Russell B. Carson, Gordon B. Carver, Richard S. Doyle, Arthur L. Eberly Jr., Leonard A. Erdman, Frederick W. Fisher, David C. Lane, John H. Mickley, Ray E. Murphy Jr., Henry D. Perry Jr., Lees M. Schadel, Daniel C. Smith, Robert J. Steinborg, Robert G. Talley, W. Dotson Wells (Absent—Miles J. Bielek, Yale Citrin).

CHARLOTTE—Carl N. Reilly.

CLAY—William A. Mulford.

COLLIER—William J. Bailey, Fred A. Butler.

COLUMBIA—(Absent—Frank E. Adel).

DADE—James L. Anderson, David J. Becker, Jerome Benson, Morris H. Blau, Rufus K. Broadaway, Harvey E. Brown Jr., Manuel L. Carbonell, Sol Center, Richard C. Clay, Francis N. Cooke, Milton Coplan, Vincent P. Corso, Edward W. Cullipher, Joseph H. Davis, Richard C. Dever, Robert F. Dickey, J. Lee Dockery, L. Washington Dowlen, Franklin J. Evans, Richard M. Fleming, M. Eugene Flipse, Milton S. Goldman, Marshall F. Hall, Henry C. Hardin Jr., Jim C. Hirschman, E. Douglas Hutson, James J. Hutson, Truxton L. Jackson, Paul S. Jarrett, James R. Jude, Matthew A. Larkin, John B. Liebler, Joseph Lomax, Ronald J. Mann, Paul W. Mayer, James H. Mendel Jr., John D. Milton, William T. Mixson Jr., Charles Monnin Jr., Elwin G. Neal, Jean Jones Perdue, Edwin P. Preston, Walter Sackett Jr., M. Murray Schechter, Daniel L. Seckinger II, Everett Shocket, David Sims, Thomas W. Skaggs, Gilbert B. Snyder, Donald G. Stannus, William R. Stinger, Mario M. Stone, William M. Straight, Charles F. Tate Jr., Maynard F. Taylor, William B. Welch, Arthur W. Wood Jr., Scheffel H. Wright (Absent—Caroline B. Hunter, William G. Aten Jr.).

DeSOTO-HARDEE-GLADES—Calvin W. Martin.

DUVAL—Samuel J. Alford Jr., Robert J. Brown, Clyde M. Collins, Ensor R. Dunsford, Thomas S. Edwards, John J. Fisher, Karl B. Hanson, Forrest M. Haswell, Mackenzie A. Manson, Charles B. McIntosh, Thad Moseley, Harry W. Reinstine Jr., C. Burling Roesch, Wilbur C. Sumner, William A. Van Nortwick, James W. Walker, Jonathan H. Wood (Absent—Albert H. Wilkinson Jr.).

ESCAMBIA—Reed Bell, Theodore J. Marshall, Lockland V. Tyler Jr., Earl G. Wolf (Absent—Charles J. Kahn, Julian O. Olsen Jr.).

FRANKLIN-GULF—Joseph P. Hendrix.

GADSDEN-LIBERTY—James B. O'Connor.

HIGHLANDS—Donald C. Hartwell.

HILLSBOROUGH—Richard H. Blank, Harold D. Brewer, Francis C. Coleman, John C. Fletcher, Linus W. Hewit, Richard S. Hodes, James M. Ingram, Victor H. Knight, Eugene B. Maxwell, W. Mahon Myers, Charles L. Pope, William W. Trice Jr., Harold L. Williamson, Morris Waisman (Absent—Richard G. Connar).

INDIAN RIVER—Charles C. Flood.

JACKSON-CALHOUN—William F. Brunner.

LAKE—J. Basil Hall (Absent—Bergon F. Brokaw).

LEE-HENDRY—Fred J. Burford, Wallace M. Graves Jr., Edward W. Salko.

LEON-WAKULLA-JEFFERSON—Edward G. Haskell Jr., Nelson H. Kraeft, Stuart C. Smith, Robert N. Webster.

MANATEE—John L. Knowles, Roger Meyer, Joseph F. Newhall Jr.

MARION—Alexander Goulard Jr., Henry L. Harrell.

MONROE—Joseph L. Lester Jr.

NASSAU—(Absent—J. B. Britton).

OKALOOSA—Eugene R. Celano, William W. Thompson.

ORANGE—Benjamin M. Cole, Norman F. Coulter, Francis M. Coy, Robert W. Curry, Truett H. Frazier, Howard B. Goodrich, Paul C. Harding, Harold W. Johnston, Franklin B. McKechnie, Louis C. Murray, Charles R. Sias, Edward W. Stoner, Miles W. Thomley (Absent—Franklin G. Norris).

PALM BEACH—Willard F. Ande, Carl E. Andrews, Vernon B. Astler, James R. Brandon, Tscheng S. Feng, James R. Forlaw, Russell D. D. Hoover, Bernard Kimmel, H. John Richmond, Harold A. Yount (Absent—M. A. Crispin, Joseph C. Doane, Nicholas S. Petkas).

PASCO-HERNANDO-CITRUS—William H. Hubbard, W. R. Jenkins.

PINELLAS—Joseph A. Ezzo, Douglas W. Hood, David S. Hubbell, John T. Karaphillis, Charles H. Lasley, Jack A. MaCris, Donald G. Nikolaus, Thomas M. Quehl, Frederick O. Smith, Richard C. Trump, Walter H. Winchester, Rowland E. Wood (Absent—David K. Davis, Charles A. Johnson, James M. Stem, Abbott Y. Wilcox Jr.).

POLK—James R. Boulware III, Howard M. DuBose, Spencer R. Garrett, John W. Glotfelty, Marion W. Hester, Willard E. Manry Jr., Arthur J. Moseley Jr., (Absent—J. Gerard Converse).

PUTNAM—Fairfax E. Montague.

ST. JOHNS—William W. O'Connell.

ST. LUCIE-OKEECHOBEE-MARTIN—John M. Gunsolus, Howard C. McDermid.

SANTA ROSA—(Absent—Joseph M. Bosworth).

SARASOTA—Irving A. Beychok, John O. Binns III, John M. Butcher, Samuel E. Kaplan, Franklin H. Pfeiffenberger, Karl R. Rolls.

SEMINOLE—Fred Ionata, Luis Perez.

SUWANNEE-HAMILTON-LAFAYETTE — (Absent—Wilton R. Kane).

TAYLOR—James A. Rawls Jr.

VOLUSIA—Thomas D. Cook, Charles L. Rickerd (Absent—C. Robert DeArmas, Harry G. Gillis, Robert L. Stevenson).

WALTON—(Absent—Edgar H. Myers).

COUNCIL ON SPECIALTY MEDICINE—Fred C. Andrews, James D. Beeson, West Bitzer, Jack H. Bowen, Andre S. Capi, James W. Clower Jr., Emmet F. Ferguson Jr., Joseph G. Matthews, Sanford A. Mullen, Curtis G. Rorebeck, Richard G. Skinner Jr., Edward

J. Sullivan Jr. (Absent—Samuel G. Hibbs, Bernard L. N. Morgan, Robert E. Raborn).

DELEGATES TO AMA—Jere W. Annis, Reuben B. Chrisman Jr., Burns A. Dobbins Jr., Francis T. Holland, Robert E. Zellner.

PAST PRESIDENT TO AMA—(Absent—Edward R. Annis).

OFFICERS—Henry J. Babers Jr., Jack Q. Cleveland, James T. Cook, Charles K. Donegan, Irving E. Hall Jr., Floyd K. Hurt, W. Dean Steward.

BOARD OF PAST PRESIDENTS—Jere W. Annis, Samuel M. Day, H. Phillip Hampton, Ralph W. Jack, Edward Jelks, Walter C. Jones, Francis H. Langley, John D. Milton, George S. Palmer, Warren W. Quillian, William C. Roberts, W. Dean Steward, Joseph S. Stewart, Leo M. Wachtel, Robert E. Zellner (Absent—Orion O. Feaster, Frederick K. Herpel, Duncan T. McEwan, Robert B. McIver, Walter C. Payne Sr., Eugene G. Peek Sr., William M. Rowlett, William C. Thomas Sr.).

BOARD OF GOVERNORS—William J. Dean, Eugene G. Peek Jr., William M. C. Wilhoit.

The Speaker recognized distinguished guests from allied professions: Miss Helen Voss, R.N., President, Florida Nurses Association, and Miss Joyce M. Flaig, President, Florida Chapter, American Physical Therapy Association.

The Speaker announced that one item at the First House of Delegates was a meeting of Reference Committee No. III which considered the change in the By-Laws concerning the method of amending the By-Laws, and reported during that meeting. He asked the delegates to turn to page 45, paragraph 4 in the Handbook. The Reference Committee had reported favorably on this amendment and it had lain on the table for a day as prescribed by the present By-Laws.

Motion was carried to approve this change in the By-Laws:

12. Chapter XIV. Section 1. By-Laws Amended—THESE BY-LAWS MAY BE AMENDED BY FIRST BEING CONSIDERED BY THE BOARD OF GOVERNORS, AND THE REPORT OF THE BOARD OF GOVERNORS SHALL BE SUBMITTED TO THE HOUSE OF DELEGATES AND THE APPROPRIATE REFERENCE COMMITTEE. AFTER THE REPORT OF THE REFERENCE COMMITTEE, IT SHALL REQUIRE A MAJORITY VOTE OF THE DELEGATES SEATED TO PASS SUCH AN AMENDMENT.

The Speaker stated that on any subject on which there were debate, he would limit the first protagonist and the first antagonist to five minutes and thereafter two minutes per speaker. The speakers would be notified when their time was up by a timing device which would sound a buzzer. He called to the attention of the delegates that this was a rule of the House which could be over-ridden by a two-thirds vote of the House.

The Speaker then called for the report of Reference Committee No. I.



House of Delegates head table and rostrum with President at microphone.

Report of Reference Committee No. I
Health and Education

Dr. Joseph S. Stewart, Chairman, asked the members of his committee to come up and stand with him so that they could assist him if necessary.

Dr. Stewart: "Your Reference Committee on Health and Education has considered each of the items referred to it and submits the following report. The Committee's recommendation on each item will be submitted separately and we request that each item be acted upon separately before proceeding to the next."

Council on Scientific Activities

"The Reference Committee considered the report of the Council on Scientific Activities on page 20 of the Handbook and wishes to make the following amendment:

"Paragraph 1, line 4, Medical Schools, add the words 'graduate and' so that the sentence will read: '—This subject was taken up with the deans and it was agreed this should be done more properly at the graduate and continuing education level rather than at the undergraduate level.'

"The Reference Committee recommends that the report of the Council on Scientific Activities be adopted as amended."

Motion was seconded and carried.

Council Report

RICHARD C. DEVER, *Chairman*

The Council met on March 23, 1969 to review the activities of its committees and to make recommendations to the Board of Governors for the advancement of the scientific activities of the Association.

The Council reviewed and discussed the Conference on Medical Education sponsored by the Association which was held in Tampa, February 15-16, 1969. The Council believes that the results of this meeting will be significant and long-reaching in the future of medical education at all levels in the state. The resolution proposing a Commission on Medical Education adopted by the conference and referred to the Association was considered and approved by the Council, following its endorsement by the Committee on Medical Schools. It was referred to the Board of Governors for study and possible implementation.

After reviewing the discussions of the February conference, the Council believed that the mandatory requirement of participation in continuing education for continuing membership in the Association is not appropriate at the present time.

The Council endorsed the suggestion of the Conference on Medical Education that a second such conference be held in the coming year on a more structured basis.

The Council reviewed the request for approval of the Lafayette County Community Health project and noted that this program was in being at the present time. The Council expressed concern about the necessity for strict and close supervision of the project in order to make it a valid educational experience and to avoid problems in the licensure and medicolegal areas. Participation by Association members in nearby areas in the project and in its planning and administrative phases was believed desirable.

The Council voted that the request for support of a grant proposal for establishment of a regional medical library and information retrieval system in the Southeastern U.S. was moot, as the grant proposal had been denied.



Members of Reference Committee I were (left to right) Drs. John W. Glotfelty, Lakeland; Billy Brashear, Gainesville; Joseph S. Stewart, Miami (Chairman); Miles W. Thomley, Orlando, and Stuart C. Smith, Tallahassee. Miss Sandy Stanley was recording secretary.

Committees:

The Journal and Other Publications—The Journal has undergone a number of changes in format and physical appearance during the year. The supply of articles for publication continues to be good and special editions are in preparation. The problem of declining advertising revenue continues as a nationwide problem and is complicated by action relative to taxing of advertising revenue which may have to be faced in the future. The committee is especially anxious for the Journal to be more frequently used as a means of communication between Florida physicians and as a forum for their ideas and proposals.

Medical Schools—The Committee on Medical Schools has continued its active and sometimes spirited dialogue with the state's medical schools. It has offered its meetings as a forum for communication between the state's practicing physicians and medical educators. It participated in the Conference on Medical Education, endorsed the conclusions reached, and recommends the continuance of this type of dialogue as essential to medical education at all levels.

Teaching of medicolegal jurisprudence and medical ethics in medical schools.—This subject was taken up with the deans and it was agreed this should be done more properly at the graduate and continuing education level rather than at the undergraduate level. The medical schools were requested to submit a statement to the Association on the subject.

Teaching of occupational health and industrial medicine in medical schools—This also was taken up with the deans and was considered to be more properly in the realm of continuing and community education. The medical school representatives agreed to note this subject and discuss it with their faculties.

Expansion of physical therapy training programs—In discussing this matter with the deans, it was reported that the University of Florida already is expanding its program and that the University of South Florida has a planning grant for this purpose. Representatives of the Committee on Medical Schools are taking up the subject with the University of Miami.

Postgraduate Education—The committee has continued to review and approve educational programs seeking co-sponsorship of the Association. It has noted that the proposal for a Commission on Medical Education may ultimately assume in large part its role in furthering continuing education programs in the state.

Research—The committee notes that the reporting of projects and final results of research funded by the Florida Medical Foundation which was previously requested is now occurring and that the first article to result from such research is being submitted to the Journal.

Scientific Assemblies—The committee has undertaken a project of revising the scientific sessions of the annual meeting to increase participation and attendance. The new format, which involves the state specialty societies, will require careful evaluation at this present meeting and may require revision in the light of this experience. The committee selected the scientific exhibits and recommended discontinuance of cash awards for scientific exhibits in favor of a certificate of recognition. In addition, they recommended that committees of the Association and the specialty societies be permitted to utilize unsold technical exhibit space up to a limit of five spaces.

Recommendations:

1. That a second conference on medical education again be sponsored by the Association to continue the discussions of the recent one and to make further proposals in this field.

2. That the Association not at this time make participation in continuing education programs a requirement for continued membership in the Association.

3. That the following resolution be approved and implemented:

Whereas, the practicing physician is concerned with the highest quality of health care to the public; and

Whereas, the practicing physician has a stake in medical education as a means for raising professional standards and for attracting and providing young talent for the continuing improvement of health care; and

Whereas, the State of Florida needs to develop more effectively all its resources for medical education for the benefit of the health of its people; therefore be it

RESOLVED, by the participants of a conference on medical education held February 15-16, 1969, under the auspices of the Florida Medical Association, to recommend to the Board of Governors of the Association that the Florida Medical Association and the Board of Regents of the State of Florida establish a Joint Commission on Medical Education to examine critically all phases of medical education, i.e., continuing medical education for the practicing physician, graduate medical education, and undergraduate medical education, including preprofessional preparation for it.

It is suggested that this commission make specific recommendations as to the initiation and coordination of needed educational programs. It is further suggested that the commission be composed of representatives from organized medicine, medical schools, community educational programs and the public.

Council on Specialty Medicine

Dr. Stewart: "The Reference Committee considered the report of the Council on Specialty Medicine on page 21 of the Handbook and recommends that it be approved with the following amendment:

"On page 22, paragraph 7, item 10—Mayo Clinic (Lafayette County)—the addition of the following:

1. An advisory committee should be formed consisting of one doctor from each of the four adjacent communities; namely, Lake City, Live Oak, Madison and Perry. The fifth member should be a staff member from the University who is working on the Mayo Project or its director, Dr. Reynolds. Each doctor member should be selected by his colleagues in each community and should serve for one to three years in this capacity (staggered terms).
2. This advisory committee should serve as the official liaison committee between the Mayo Project and organized medicine in Florida.
3. The chairman of this committee should be elected from one of its five members.
4. All future communications with the press should be coordinated with this committee to prevent future problems developing between the clinic personnel and the practicing physicians in the area.
5. The use of practicing physicians in the area for teaching purposes and coordination of clinic activities is to be encouraged.
6. Another meeting of all the involved doctors, similar to the meeting held May 8, 1969, be held in three months to re-examine the progress in the above-mentioned area.

"The Reference Committee recommends that the report of the Council on Specialty Medicine be adopted as amended."

Dr. Joseph G. Matthews, Orange: "This is my report. If these amendments are passed as pre-

sented, it will appear to be part of our council report and we did not make these recommendations."

Dr. Stewart: "We will make two motions; one that your report be approved, and the second, to add these amendments as recommendations of the Reference Committee."

The additions made by the Reference Committee were approved as presented.

Motion was carried to approve the report of the Council on Specialty Medicine as printed in the Handbook with the exception of that portion of the report referred to other Reference Committees.

Council Report

JOSEPH G. MATTHEWS, *Chairman*

The Council on Specialty Medicine met three times during the past year at which meetings the following matters were presented for consideration and acted upon:

1. Annual Report of Council—The Council requested the Board of Governors to lay down ground rules acceptable to them that will result in all council reports being published in the Handbook exactly as they are submitted to the Board. President Cleveland met with the Council in December and explained the necessity of editing Annual Reports and it was agreed the Council would submit a full report as well as a digested version.

2. Relative Value Studies—The Council recommended to the Board of Governors that a continuing study of the RVS is needed so that it will be updated continually and that it be revised with the help of paid professionals. This recommendation was also made by the Council on Medical Economics and was approved and appropriate arrangements have been made utilizing the actuarial and statistical services of William M. Howard, Ph.D., Professor of Finance and Insurance, University of Florida.

The Council received several lists of suggested changes of relativity in the specialties of Ob-Gyn, Proctology, Neurosurgery. These suggested changes were discussed and then passed on to the Relative Value Study Committee for consideration. (R.C. V took no action)

3. Workmen's Compensation—The Council reaffirmed to the Board of Governors that FMA institute legal action to end the impasse in negotiations for revision of the Workmen's Compensation fee schedule. The Board appointed a special committee to assist FMA legal counsel in preparation of a petition to the Commission requesting that equitable adjustments be made in the revised Workmen's Compensation Fee Schedule made effective February 1, 1969 (R.C. V took no action)

4. FMA House of Delegates Annual Meeting—The Council recommended that a study commission be set up to "streamline" the second meeting of the House of Delegates; suggesting that ceremonial "niceties" and elections perhaps could be held prior to the Sunday morning meeting. The format of the annual meeting has been revised.

5. FMA Membership in Associated Industries of Florida—The Council recommended that the Board of Governors review its stand in regard to membership in Associated Industries. The Board of Governors recommended that the Association *not* join because previous membership and present circumstances indicate that it would serve no useful purpose.

6. Legislative and Other Governmental Regulatory Agency Hearings—The Council recommended that when the FMA learns that legislative and other governmental regulatory agency public hearings are scheduled that presidents and secretaries of all affected or involved specialty groups and members of the Council on Specialty Medicine be notified and chairmen of county medical society legislative committees, if time permits; and that adequate funds be provided for the legislative activities in Tallahassee."

7. Relationship Between Doctors of Medicine and Paramedical Personnel—The Council submitted a recommendation regarding this matter and was advised that it is currently under study by the Judicial Council and a special ad hoc committee has been appointed for this purpose. A representative of the Council had been appointed to this special committee.

8. Prophylactic Treatment of Tetanus—The problem regarding legal requirements of prophylactic treatment of tetanus was discussed and it was believed that the FMA should encourage active immunization programs and made six specific recommendations to help implement this.

9. Medical Schools—The Council considered the report of the meeting of the Committee on Medical Schools and gave consideration to (a) academic enrichment fund and (b) Department of Pathology, University of Florida, with the following recommendations:

a. That the Judicial Council look into the possibility of fee splitting by university medical school hospitals and teaching staffs in general and, more specifically, the contractual arrangement which currently exists at the Broward General Hospital.

b. That the chairman of the Council request the Committee in Medical Schools to provide an expression as to whether or not such action on the part of the University of Florida College of Medicine was proper in appointing a nonpathologist as chairman of the Department of Pathology, University of Florida College of Medicine.

Subsequently, the chairman of the Committee on Medical Schools met with the Council and clarified the committee's report and the Council is now satisfied that proper FMA action has been taken.

10. Mayo Clinic (Lafayette County)—The Council considered the recommendation of another Council that the health plan was too loosely constructed and has too many ramifications and that careful study needs to be made before proper decision by FMA can be made. The chairman visited the clinic after it had been open for six days and will re-evaluate it at a later date. The Board of Governors approved the recommendation of the Council on Specialty Medicine with the amendment that this matter be referred back to the Council on Medical Services, and Council on Specialty Medicine, and referred to the Scientific Council and the State Board of Medical Examiners for further study.*

11. American Board of Family Practice—The Council approved a resolution supporting the formation of the American Board of Family Practice. Of recent date the American Medical Association has taken action establishing this new specialty.

12. Ophthalmic Technicians—The Council considered the use of ophthalmic technicians for technical and other services necessary for the complete ophthalmologic workup of the patient and, in doing so, recommended approval of the following resolution:

RESOLVED, the Florida Medical Association goes on record as approving the use of ophthalmic technicians under the personal supervision and responsibility of the ophthalmologist for such technical services as refraction of the eye and other applicable services necessary for the complete ophthalmologic workup of the patient.

*Note additional recommendations on this subject made by Reference Committee I on page 494.

Board of Governors' Actions

Action No. 4. Improved Communications.

Dr. Stewart: "The Reference Committee considered the Board of Governors report—Action No. 4. page 39 of the Handbook and recommends that it be approved with the following amendment:

"Add at the end of the paragraph the following sentence: 'A method other than scrambled television network and video tape presentations should be explored since it appears that from a practical standpoint these methods have not been satisfactory.' "

Motion was carried to approve this amendment and to approve the Board action as amended.

(See Board of Governors report, page 512)

Action No. 9. Specialty Societies.

Dr. Stewart: "The Reference Committee considered Action No. 9 of the Board of Governors and recommends that it be approved as printed in the Handbook."

Motion carried.

(See Board of Governors report, page 512)

Action No. 13. Board of Regents.

Dr. Stewart: "The Reference Committee considered Action No. 13 with the recommendation that if a joint commission on medical education is formed consisting of Florida Medical Association and Board of Regents members, then the Association's Committee on Medical Schools will not be necessary."

Motion was carried to approve this amendment and to approve Board action No. 13 as amended.

(See Board of Governors report, page 512)

Action No. 27. Lafayette County Project.

Dr. Stewart: "The Reference Committee considered Action No. 27 of the Board of Governors and recommends that it be approved with the recommendation that in regard to Item b., reference be made to the portion of the report of the Council on Specialty Medicine which refers to this same subject."

Motion carried as amended.

(See Board of Governors report, page 512)

Special Report to Board of Governors
Ad Hoc Committee on the Florida Regional Medical Program

Dr. Stewart: "The Reference Committee recommends that the report of the Ad Hoc Committee on the Florida Regional Medical Program be approved as printed in the Handbook."

Motion was carried.

Ad Hoc Committee Report

H. PHILLIP HAMPTON, *Chairman*

We are pleased to report that during the past year the Florida Regional Medical Program has achieved considerable progress. It secured a full-time Director, Dr. Granville W. Larimore and opened a headquarters office in Tampa toward the end of October. In February it attained operational status, that is, it became approved for nine operational projects in addition to carrying on a continuing planning activity.

Besides the headquarters office, three area offices serving the North Florida, Mid-Florida and South Florida areas are now in operation in Gainesville, Tampa and Miami. The headquarters and area offices have been initially staffed with the personnel needed to get under way in attaining for Florida the objectives of Public Law 89-239 which aim at affording ". . . to the Medical profession and Medical institutions of the nation—the opportunity of making available to their patients the latest advances in the diagnosis and treatment of these diseases" (heart disease, cancer and stroke).

The Florida Regional Medical Program is currently funded at an annual level of $1,470,000. This includes funds for essential core staff plus support for the nine approved operational projects. The grantee institution for the Program is the Florida Advisory Council, Inc. on whose Board there are four representatives of the Florida Medical Association and its Executive Director.

Supporting the Program are five Task Forces that provide professional guidance in the areas of heart disease, cancer, stroke, continuing education and health education. Overall program advice and guidance are provided by the Florida Advisory Group which is widely representative of professional and public interests.

The Florida Regional Medical Program is most grateful for the splendid support and cooperation of the Florida Medical Association and looks forward to the opportunity of a continuing relationship in its efforts to help medical profession and medical institutions make available to their patients the latest advances in the diagnosis and treatment of heart disease, cancer and stroke.

Resolution 69-4
Board of Immunology and Allergy (Not Approved)

Dr. Stewart: "The Reference Committee recommends that this resolution on 'Board of Immunology and Allergy' not be approved."

Dr. Norman F. Coulter, Orange: "I attended Reference Committee No. 1 and my testimony was in opposition to this resolution. However, my testimony was based on information I had

received that the American Academy of Allergy and the Florida Allergy Society were not in favor of this Board. This information was erroneous."

Dr. Stewart: "Dr. Coulter's testimony did bear some weight with the committee."

Dr. Robert J. Brennan, Broward: "Yesterday, the Florida Allergy Society voted unanimously to ask that the House of Delegates approve this resolution. I would like to ask the privilege of the floor for Dr. George F. Hieber of St. Petersburg, President-Elect of the American College of Allergy to address this group."

Dr. Hieber: "I appreciate this opportunity to speak to you. I was quite surprised to find when I arrived here on Friday that this resolution had been turned down. Other state delegations have passed resolutions similar to this; both the national allergy associations have approved this. This resolution calls for a primary board, without the necessity of first taking the Board of Internal Medicine or the Board of Pediatrics. The sole purpose is to insure better care for the patient; to make care for patients more available by well qualified allergists. The field of allergy today has become so extensive I am sure the men who are certified cannot keep up with all of the literature that is coming out on internal medicine and allergy. The idea is to set up a Board that will include not only internal medicine and pediatrics, but also other specialties as well. It is just too much to get all this training following the three years which are necessary to qualify for the American Board of Internal Medicine. Young men are not being attracted into the field and it is unfair to you who are certified in your own field to have to depend on someone who does not have an equal amount of training in his field. The idea is better care for the patient and to get a better program in medical schools for training allergists."

Dr. Edwin P. Preston, Dade: "I am in favor of this resolution."

Dr. John W. Glotfelty, Polk: "I was a member of this Reference Committee. If you will read this resolution, you will see that the reasons given are nothing like the ones stated in the resolution. Our feeling was that the resolution would be much better if it were rewritten. The Reference Committee objected to the wording of this resolution."

Dr. Robert L. Andreae, Broward: "I speak as an internist and I speak for myself. I think it is imperative that we do this and do it now. A good portion of the training in internal medicine is superfluous and a great portion of it is inadequate for the training of an allergist. For instance, to be certified in internal medicine, one has no extensive training in pediatrics and obviously, a great portion of the work of the allergist is in pediatrics. It does a great injustice to the allergist and I see no point in putting it off."

Dr. James R. Jude, Dade: "I don't speak for either side, but want to point out some problems of which we should all be cognizant. We should consider just exactly what basic knowledge everyone requires. In many medical schools, there is more and more drive toward the smaller and smaller core of medicine and then quickly going on into one of the specialties of medicine. This can go to the extreme so that the man who is going into psychiatry may get no basic training in surgery or internal medicine or anything else. We have to be very careful when we consider someone going into a sub-specialty without getting broad basic knowledge."

Dr. David J. Becker, Dade: "I would like to point out that, of the three years spent in training in internal medicine, one may be spent in allergy and be acceptable to the Board of Internal Medicine, so that one does not have to go through three years of internal medicine and then have to take all of the additional training in allergy. The type of person who will become a practicing clinical allergist with a brief period of training will neither be inhibited by the regulations as they currently stand or the regulations as they might become if this resolution is passed."

Dr. Francis C. Coleman, Hillsborough: "I speak neither for nor against the resolution. I wish to speak on the content of the 'Resolved.' It is my understanding that a primary board is created through the Advisory Board for Medical Specialties, not through the House of Delegates of the American Medical Association. My concern is that if we adopt the resolution as presented, we are mandating our delegates to the AMA to try to achieve something that is unachievable by this route."

Dr. Brennan, Broward: "I would like to speak in rebuttal to some of these speakers. This question of not getting training in other fields is not quite true, because in allergy we dip into practically every field. This proposed residency would include training in internal medicine, ENT, dermatology, and other specialties including psychiatry. Therefore, when a doctor finished this training, he would be very well rounded in many subjects, but only to the extent that might be nec-

essary for his work in immunology and allergy."

A standing vote was required and the resolution was not approved by a vote of 122 to 100.

Resolution 69-13

Rapport with Medical Youth (Not Approved)

Dr. Stewart: "The Reference Committee considered resolution No. 69-13 and recommends that it not be approved."

Motion carried.

Resolution 69-16

Dr. Stewart: "The Reference Committee considered resolution No. 69-16, Family Practice, and recommends adoption with the following amendment: That in the 'Resolved' the words 'or community health care' be stricken and at the end of the paragraph the words be added, 'at the earliest possible date.' "

Motion was carried and the resolution was approved as amended.

Family Practice
Leon-Wakulla-Jefferson County Medical Society

Whereas, There is a critical shortage of physicians in the United States including the State of Florida, and

Whereas, The most critical shortage of physicians in Florida is in rural areas that have lost a large number of general practitioners, and

Whereas, The need of family physicians and generalists has been recently recognized by the American Medical Association through its approval of a Board of Family Practice; therefore, be it

RESOLVED, That the Florida Medical Association reaffirm its backing of this Board and further recommend to the Board of Regents and the medical schools at Gainesville, Miami, and Tampa that Departments of Family Practice be formed and included as a basic part of the curriculum for all medical students in this state at the earliest possible date.

Resolution 69-17

Dr. Stewart: "The Reference Committee recommends that resolution No. 69-17 be referred to the Board of Governors for appropriate action."

Dr. J. Gerard Converse, Polk: "It should be the obligation of this House to decide this issue, rather than refer it to the Board of Governors without any recommendation."

Motion to refer to the Board of Governors was carried.

Medical Education
Leon-Wakulla-Jefferson County Medical Society

(Referred to Board of Governors)

Whereas, There is a critical shortage of physicians in the United States, including the State of Florida, and

Whereas, Florida is experiencing the nation's most rapid growth in individuals over 45 years of age who require the most medical care, and

Whereas, The first two years of medical school with training in the Basic Medical Sciences presents the most critical shortage at present, and

Whereas, The Florida State University has an excellent Basic Science Program and Graduate Program in related fields and this program could be expanded to include the Basic Medical Sciences needed for the first two years of medical training with a minimum effort, and

Whereas, The feasibility factors for the establishment of a two year medical school are very favorable for the Florida State University and the adjacent medical community, and

Whereas, Most established four year medical schools have openings in their third year classes for transfer students from two year medical schools and these schools are actually seeking such transfer students; therefore be it

RESOLVED, By the Florida Medical Association that full endorsement and cooperation be given to the Board of Regents and the Administration of the Florida State University for the establishment of a two-year program in Basic Medical Sciences at the Florida State University with the maximum utilization of the local physicians and the local hospital facilities for teaching purposes.

Resolution 69-31

Dr. Stewart: "The Reference Committee considered resolution No. 69-31, Medical School Survey by AMA, and recommends adoption with the following amendment:

"That the words 'Council on Medical Education and the Council on Medical Service of the' be stricken."

Motion was carried to amend as recommended and motion also was carried to approve the resolution as amended.

Medical School Survey by AMA
Dade County Medical Association

Whereas, The House of Delegates of the American Medical Association at Houston in 1967 adopted Guidelines for Medical Staffs in Hospitals with Intern and Resident Training Programs, and

Whereas, There appears to be a great variation in programs established by teaching institutions to collect fees from Medicare and Medicaid for care provided through such training programs, and

Whereas, The propriety of the methods for collection and distribution of fees collected in some of these programs has been questioned; now, therefore, be it

RESOLVED, That the American Medical Association be requested to survey the medical schools in the United States to ascertain whether funds for professional services are being obtained from Medicare and Medicaid contrary to the spirit of the Law, the Principles of Medical Ethics and the policies of the House of Delegates and whether the distribution of these funds is consistent with the Principles of Medical Ethics and the policies of the House of Delegates, and the results of the survey with appropriate recommendations be submitted to the House of Delegates at the Clinical Meeting in Denver.

Dr. Stewart: "Mr. Speaker, the chairman of Reference Committee No. 1 would like to thank our little secretary, Miss Sandy Stanley, for her wonderful work and in addition, I would like to thank you, Mr. President, for appointing such brilliant and delightful gentlemen to serve on this committee."

Report of Reference Committee No. II
Public Policy

Dr. Louis C. Murray, Chairman: "Mr. Speaker, Mr. President and Members of the House of Delegates:

"Your Reference Committee on Public Policy has considered each of the items referred to it and submits the following report. The Committee's recommendation on each item will be submitted separately and we request that each item be acted upon separately before proceeding to the next."

Council on Allied Professions and Vocations

Dr. Murray: "The Reference Committee approved the report of the Council on Allied Professions and Vocations as printed in the Handbook."

Motion carried to approve the report, except for those portions referred to other reference committees.

Council Report

JAMES W. WALKER, *Chairman*

The Council met on Octoher 13, 1968 and March 23, 1969. The Council considered the Board of Governors actions in approving recognition of the Florida Dietetic Association and recommended appointment of a committee on dietetics to be added to the Council. The Council also considered a lengthy report from Dr. Louis P. Brady of Orlando regarding the serious problem involving podiatrists throughout the state. Podiatrists are becoming increasingly aggressive in surgery of the lower extremities and have gotten into osteopathic hospitals. In addition, legislation has been introduced in Tallahassee to expand the definition of the Podiatry Act which among other things includes recognition of podiatrists by insurance companies as professional physicians and surgeons, treating them in the same manner as M.D.'s.

Five of the committees (Physical Therapy, Nursing, Veterinary Medicine, Religion and Law) have been active and have made real contributions to the work of the Association. Radiologic and Nuclear Medicine and the Committee on Medical Assistants have been operational but have had no prohlems with which to deal, and have thus been relatively quiet. The committees on Dentistry, and Medical Technologists have not been active committees this year.

Committee on Medical Assistants—No business was brought to the attention of the committee during the year. The problems that seemed to plague the medical assistants for the past two years have heen resolved satisfactorily, and the organization seems to be growing.

Committee on Nursing—During the year, the committee has been active and met several times. Working in cooperation with the Florida Nurses Association, the first Florida Nurse-Physician Conference was held on June 7-8, 1968, which gained national attention. A joint meeting of the FMA Committee on Nursing and the Florida Nurses Association was held March 22, 1969 in Orlando. After considering the results of the questionnaire sent out to participants in the conference, it was agreed that a second state physician-nurse conference would he valuable and that sources for funds to hold such a conference would be investigated. In compliance with actions of the 1968 House of Delegates, liaison with inhalation therapists has been transferred from the Committee on Physical Therapy to the Committee on Nursing and liaison is now being de-



Reference Committee II personnel consisted of (left to right) Drs. Robert J. Brown, Jacksonville; John M. Butcher, Sarasota; Louis C. Murray, Orlando (Chairman); Eugene B. Maxwell, Tampa, and Richard C. Clay, Miami.

veloped. The Committee considered experimental programs being devised at universities for training nurses, physician's assistants and other allied health personnel under the Regional Medical Program. It was the committee's opinion that a general statement of policy should be forthcoming covering all activities in this area rather than statements of policy on individual programs. The committee also endorsed the joint statement on cardiopulmonary resuscitation.

Committee on Physical Therapy—The committee participated in the State Department of Education curriculum planning for the Physical Therapy Assistant Program at the junior college level. The Novemher Conference on Outpatient Physical Therapy Services under Medicare resulted in letters to the Social Security Commissioner and a change in the rules to allow payment even though patients are not seen every 30 days hy a physician. In response to the request from the Florida Chapter of the American Physical Therapy Association in Novemher 1968 to report to them any irregularities hy physical therapists, several irregularities have heen referred for investigation.

The committee also considered correspondence from the Florida Chapter of the American Physical Therapy Association relating its concern over Senate Bill No. 26, an act relating to the practice of physical therapy; amending the act to open the Grandfather clause. The committee recognized there was good cause for concern in light of the fact that this had heen done twice in the past and there seems to he little value in having rules and regulations if every session of the legislature can open the act to those not qualified under the present act.

Committee on Religion—The committee held one meeting in Novemher 1968. Plans have heen made to assign a certain district of the state to each member of the committee, with each being responsible for communication and coordination with county chairmen in medicine and religion. A workshop on medicine and religion for the benefit of county chairmen was held in conjunction with the FMA Presidents and Secretaries Conference in Orlando. It was a privilege to have Dr. McCleave present. The meeting was well attended and highly informative.

Committee on Veterinary Medicine—Activity of this committee has heen limited over the major portion of the year hut recent developments are encouraging that the committee may he more productive. Arrangements have heen made to provide speakers at the time of the FMA annual meeting from the veterinary profession. These speakers will address respectively the Florida Society of Preventive Medicine and the Florida Chapter of the American College of Physicians regarding animals as vectors of human disease in Florida. It was the committee's feeling that this type of relationship should have hegun long ago and that the interest in this particular program on the part of physicians and veterinarians alike was most encouraging for future expanded relationships.

Recommendations:

1. Reaffirm the action of the 1968 House of Delegates in urging establishment of a school of physical therapy at the University of South Florida.

2. That a Committee on Opticians be established under the Council on Allied Professions and Vocations; that the membership of this committee include ophthalmologists and that the ophthalmologists be supported in their efforts to aid the opticians.

3. That the name of the Committee on Physical Therapy and Rehabilitation Therapists be changed in the By-laws to the Committee on Physical Therapy and Rehabilitation.

4. That the resolution introduced by Orange County Medical Society opposing legislation to expand the definition of podiatry be approved by the FMA. (Referred to Board of Governors R.C. IV)

5. That a Committee on Podiatry be established under the Council on Allied Professions and Vocations.

6. That Senate Bill No. 26, an act relating to the practice of physical therapy, amending the act to open the Grandfather clause, be opposed by the Florida Medical Association. (Received as information R.C. IV)

7. That programs being devised at universities for development of health manpower personnel, not previously recognized, be approved in principle as long as this type experimental development of health personnel is under adequate physician supervision and direction.

Council on Medical Services

Dr. Murray: "The Committee considered the report of the Council on Medical Services and wishes to recommend two amendments:

"That recommendation No. 8, parts (a) and (b) be changed to read:

"(a) The certificate of good health by the State Board of Health and county health departments be issued at the option of the employer but not be mandatory.

"(b) The certificate of premarital examinations should require only the certificate of serology."

The speaker ruled the question should be divided.

Dr. Franklin G. Norris, Orange: "Mr. Speaker, the Orange County delegation wish to change part '(a)' to read as follows:

"Employees engaged in food handling and similar occupational groups should present to the employer at yearly intervals evidence of a negative chest x-ray. This x-ray may be obtained from the Tuberculosis and Respiratory Disease Association, or a physician licensed to practice medicine. The employer is responsible for maintaining this record for examination by members of the State Board of Health."

This substitute motion was seconded.

Dr. Harold W. Johnston, Orange: "The reason the request was made to have a negative chest x-ray, is because it is felt that people in food handling occupations would be, perhaps, a good source of screening for tuberculosis. We did not think that food handlers necessarily transmit tuberculosis, but if a negative chest x-ray is the

only requirement for having their occupational license approved by the Health Department, this should be an excellent way of preventing active cases of tuberculosis going undetected."

Substitute motion was carried.

The Speaker said there was no conflict between this motion and the recommendation of the Reference Committee.

Motion to approve the Reference Committee recommendation on part (a) was carried.

The Speaker asked for discussion on part (b).

Dr. Edward W. Stoner, Orange: "Having had cases with primary lesions and negative serology, and while I realize physical examinations may vary from office to office, I move to correct part (b) as originally stated in the Handbook."

The Speaker ruled that this motion was unnecessary as the report as printed in the Handbook was the main motion.

Motion to approve Part (b) was carried as originally printed in the Handbook.

Dr. Murray: "The Reference Committee recommends the adoption of the Report of the Council on Medical Services as amended."

Motion carried to approve except for portions referred to other Reference Committees.

Council Report

JAMES M. INGRAM, *Chairman*

During the past Association year, the Council held one meeting. This meeting, held March 9, 1969 in Orlando, was for the purpose of reviewing the year's activities of its individual committees, acting upon a variety of matters which had been referred to the Council, and evaluating and adopting recommendations to be included in the Council's 1968-69 annual report.

Because of time restrictions, several matters were acted upon by the Council and/or one or more of its committees. Recommendations concerning them were made directly to the Board of Governors at various times during the year; consequently, such recommendations may be included in the Board's annual report, rather than in that of the Council. Among such matters were several grant proposals to be financed under the Florida Regional Medical Program, principally from the University of Florida; the Lafayette County health care program of the University of Florida; a request from the Florida Education Association for review of the portions of the Florida teachers' contract pertaining to physical and psychiatric examinations, and the medical aspects of the activities of the Governor's Commission on Urban Redevelopment.

Most of the Council's 13 committees were active in their fields of responsibility. Three committees reported minimal or no activities. The Committee on Labor continued to be authorized an inactive status unless and until problems arise between organized labor and medicine.

Detailed individual committee reports were submitted by most of the committees and are available upon request. The following highlights of some of the committees' varied activities will provide a brief summary of the work of the Council for the past year.

The Committee on Aging concerned itself with the health phases of Florida's preparations for the next White House Conference on Aging; participated in the program of a Governor's Conference on Aging held in September, 1968; continued to represent the Association on the Florida Joint Council on Health of the Aging, and conducted an evaluation of its role and efforts. The committee's chairman served on a task force appointed by the Board of Commissioners of State Institutions (Florida Cabinet) to study the problem of caring for geriatric patients presently committed to state mental hospitals.

The Committee on Blood was especially active. It conducted an intensive study of plasmapheresis laboratories, which are growing rapidly in number and scope, and plans to issue an information bulletin to physicians on this subject. The committee also concerned itself with the entire field of blood banking and needed legislation in this field.

The Committee on Child Health remained one of the Association's busiest committees, now meeting quarterly in its capacity as School Health Medical Advisory Committee to the State Department of Education and State Board of Health. In addition, during the past year it assumed a new function as Pediatric Advisory Committee to the State Board of Health. Only a few of its many activities were the development, in conjunction with the Florida Industrial Commission, of a set of regulations for the employment of minors in television and movie productions; preparation of an index file of school health policies recommended by the committee during the past decade; review of a University of Florida Regional Medical Program grant proposal for a streptococcal typing laboratory service; review and development of recommended changes in the Florida teachers' contract, in cooperation with the Committee on Mental Health; redesign and improvement of school health record forms; updating of vision screening policies in the public schools; study and development of uniform minimal health insurance coverage for schools and students; study and action on a variety of matters in the broad area of health education, and survey and encouragement of first aid courses in the schools, as recommended by the House of Delegates in 1968.

The Committee on Emergency Medical Service assisted the State Board of Health and the Florida Medical Foundation in the development of a federal grant proposal to initiate a statewide highway evacuation and treatment program which should materially help solve the problem of rural emergency medical service; maintained surveillance over disasters and preparations for them; kept liaison with state civil defense and disaster authorities, and continued its function as state medical advisory committee for the Selective Service System.

The Committee on Maternal Health continued to provide advice and assistance to the Committee on State Legislation concerning revision of Florida's abortion statutes; developed and transmitted to the State Board of Health recommendations for immunizations during pregnancy; advised the State Board of Health regarding the regulation and licensure of nurse-midwives; reviewed various federal grant proposals in the area of maternity care and child spacing, and continued the Association's maternal mortality survey, the results of which are expected to be published separately from this report.

The Committee on Mental Retardation studied the effects of Florida's governmental reorganization on agencies and institutions rendering services to the mentally retarded; explored ways of establishing improved liaison between organized medicine and the medical personnel of the State Division of Mental Retardation; encouraged the State Board of Health in the development of a comprehensive state directory and information exchange for all child health-related services; studied case-finding, laboratory and treatment services for patients with PKU and other metabolic disorders, and developed plans for professional education programs in its field.

The Committee on Occupational Health continued to work towards the inclusion of occupational and industrial health instruction in the curricula of Florida's medical schools and maintained liaison with professional organizations in this field. The committee chairman participated as a speaker in the Florida Industrial Health Conference.

The Committee on Public Health considered and acted upon a larger variety of subjects than any other committee of the Council. Among these subjects were health cards (Resolution 68-11), premarital examinations, the status of communicable disease regulations, health education, proposed public health legislation, the status of Florida's tuberculosis hospitals, streptococcal typing services, smoking and health, governmental reorganization, the tetanus problem, family planning for discharged inmates of state institutions, and the need for bread and cereal enrichment.

The Committee on Rural Health continued to represent the Association on the joint Florida Committee on Rural Health, which meets semiannually to maintain close liaison between health and agricultural voluntary, professional and governmental groups. The member organizations of the Committee, in addition to the Association, are the Florida Agricultural Extension Service, Florida Dental Association, Florida Farm Bureau Federation, Florida Pharmaceutical Association, Florida State Board of Health and Florida State Veterinary Medical Association. The committee also studied and formulated recommendations on the following subjects: family physicians in rural areas (Council on Medical Services 1968 recommendation #18), the "Slow-Moving Vehicle (SMV) Emblem," emergency self-help instruction, ambulance services, defensive driving, emergency communications and the use of helicopters.

The Committee on Vision reviewed existing vision screening practices in the public schools and recommended revisions to the School Health Medical Advisory Committee to the State Department of Education and State Board of Health. The committee also studied the use and legal status of ophthalmic technicians under the supervision and responsibility of ophthalmologists.

All of the following consecutively-numbered recommendations and resolutions have been carefully reviewed and adopted by the Council. To facilitate the procurement of necessary additional background information, the name of the originating committee or committees precedes each recommendations, series of recommendations or resolutions.

Recommendations:

(Committee on Blood)

1. That the Association request the State Board of Medical Examiners to obtain an Attorney General's opinion on the question of whether or not plasmapheresis operations constitute a practice of medicine.

2. That the Association continue its active support of proposed legislation which would define blood banking as a service rather than the sale of a commodity. (Amended R.C. IV)

(Committee on Mental Retardation)

3. That the State Division of Mental Retardation be retained in the health sphere under the reorganization of state agencies required by the revised Florida Constitution. (Approved R.C. IV)

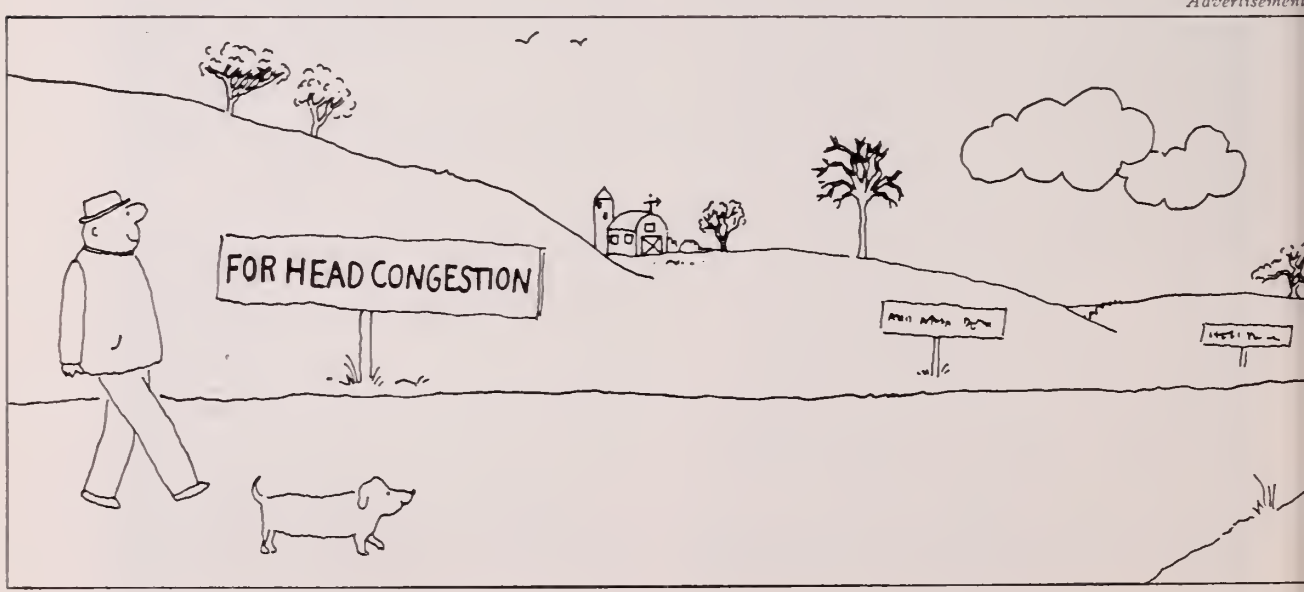
4. That new means be explored to establish improved liaison between the Association, the county medical societies and the medical personnel of the State Division of Mental Retardation, with associate membership not requiring licensure being made available uniformly throughout the state.

5. That support be given to the State Board of Health in its plans to prepare and maintain a comprehensive directory and information exchange for all child health-related services in Florida.

6. That the state legislature be urged to provide increased funding for the State Board of Health's program of case-finding and laboratory services for patients with phenylketonuria (PKU) and other metabolic disorders, and that the policy be established that the State Board of Health serve as the reference laboratory for the state, with diagnostic centers at various locations, such as the medical schools at Gainesville and Miami. (Referred to Board of Governors by R.C. IV)

7. That approval be given for a seminar on mental retardation to be held in conjunction with the Association's 1970 annual meeting, probably at the Sunland Training Center at Miami, and not in conflict with other parts of the annual meeting program.

Advertisement



(Committee on Public Health)

8. With reference to Resolution 68-11, "Certificate of Good Health and Certificate of Premarital Examination," that

(a) The certificate of good health by the State Board of Health and county health departments be issued at the option of the employer, but not be mandatory. Employees engaged in food handling and similar occupational groups should present to the employer at yearly intervals evidence of a negative chest x-ray. This x-ray may be obtained from the Tuberculosis and Respiratory Disease Association, or a physician licensed to practice medicine. The employer is responsible for maintaining this record for examination by members of the State Board of Health.

(b) The Certificate of Premarital Examination remain unchanged, and

(c) A memorandum be sent to county medical societies and physicians providing information about completion of public health certificates.

9. That the Association and the State Board of Health co-sponsor a conference on communicable diseases to develop policies and recommendations for treatment and control.

10. That State Board of Health legislative proposals pertaining to parathion control, laser beam and other non-ionizing radiations, hearing aid control, Hospital Service for the Indigent, licensure of nursing home administrators, classification of homes for the aged, ambulance service, scuba diving, and licensing of water and sewage plant operators, be approved in principle and forwarded to the Association's Committee on State Legislation for all possible support. (Approved R.C. IV)

11. That the 1967 recommendation concerning the State Tuberculosis Board be reaffirmed and that no changes be made at the present time in the number of available tuberculosis beds.

12. That all physicians be urged to provide and encourage routine tetanus toxoid immunization (except during pregnancy), that adults be given adult-type diphtheria-tetanus combined toxoid, and that plain tetanus toxoid be given as a booster following trauma.

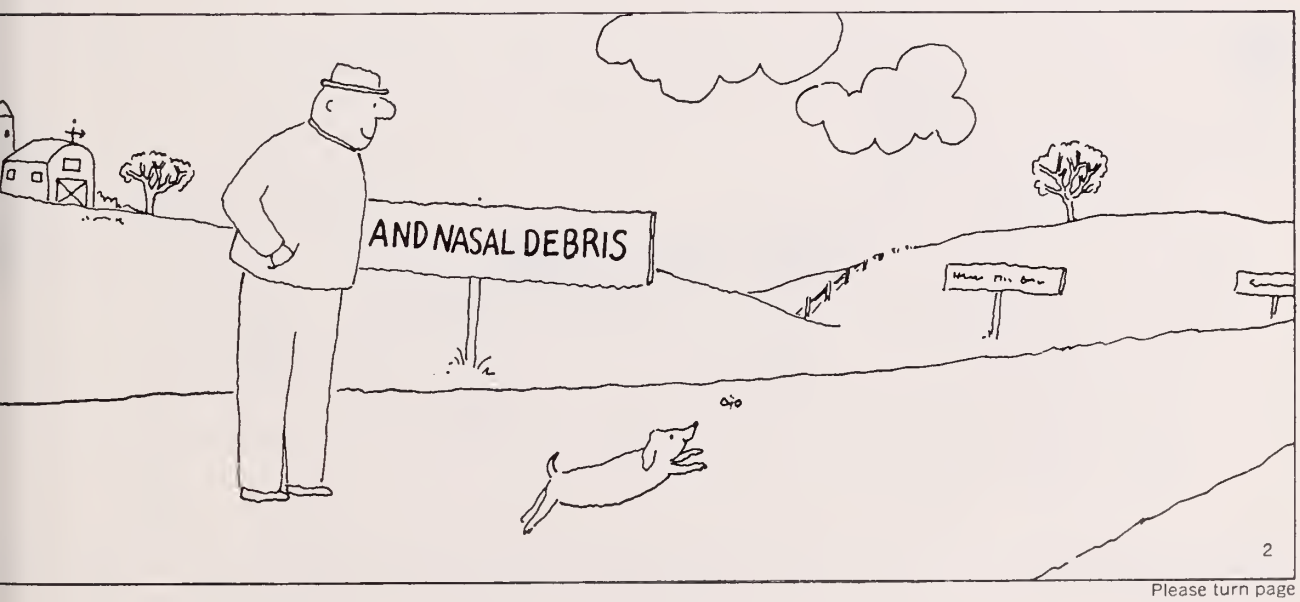
13. That the following resolution be approved and adopted:

Whereas, the State of Florida through its State Tuberculosis Board maintains two hospitals for the care of patients suffering from tuberculosis and through its Division of Mental Health maintains four hospitals for the care of patients suffering from mental illnesses, and from these hospitals discharges each year hundreds of patients, few of whom are prepared to assume the responsibilities of fathering or conceiving new life until their full recovery is assured and they have re-established stable lives; and

Whereas, the State of Florida through its Alcoholic Rehabilitation Program maintains an Alcoholic Rehabilitation Center and operates five alcoholic rehabilitation outpatient clinics from which programs hundreds of men and women suffering from alcoholism are provided care and discharged, few of whom are prepared to assume the responsibilities of fathering or conceiving new life for an extended period of time and until they have re-established orderly, secure lives; and

Whereas, the State of Florida through its Division of Youth Services maintains four training schools, two for boys and two for girls from which hundreds of upper teenage young men and women are discharged each year, few of whom are prepared to assume the responsibilities of fathering or conceiving new life for an extended period of time and until they have married and established stable families; and

Whereas, the State of Florida through its Division of Mental Retardation maintains two Sunland hospitals, four Sunland training centers and one Sunland adult center, all for the care of the mentally retarded, and from these institutions discharges each year hundreds of teenage and adult mentally retarded persons, few, if any, of whom are prepared to assume the responsibilities of fathering or conceiving new life; and



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Whereas, the State of Florida through its Division of Corrections maintains eight prisons and 19 prison road camps from which hundreds of prisoners are paroled and discharged each year, few of whom are prepared to assume the responsibilities of fathering or conceiving new life for an extended period of time and until they have re-established orderly and secure lives; now

THEREFORE, the Florida Medical Association recommends to the State Tuberculosis Board of Florida, to the Board of Commissioners of State Institutions of Florida and to the Probation and Parole Commission of Florida:

(1) That before male patients or inmates of Florida institutions are released to return home on trial visits, to be paroled or discharged, they first be given an opportunity to receive knowledge concerning the modern concepts of family planning and the availability of family planning services through both private physicians and public clinics in the communities to which they will return;

(2) That before female patients or inmates of Florida institutions are released to return home on trial visits, to be paroled or discharged, they first be given an opportunity to receive knowledge concerning the modern concepts of family planning and medical assistance in the use of a contraceptive method of their choice;

(3) That every patient or inmate have the undisputed right to reject because of religious beliefs or other reasons either or both the family planning information or family planning medical assistance which is made available by the institution; and

(4) That the medical officer of each institution be urged to seek consultative assistance in establishing the family planning services herein recommended from the Florida Medical Association or from the Bureau of Maternal and Child Health of the Florida State Board of Health.

14. That the following policy statement concerning all functions relating to the health of Florida citizens being grouped in a single state agency be approved and adopted:

All functions relating to the health protection of Florida's residents and visitors should be grouped in a single health agency. This executive department should be headed by a board made up primarily of members of the health professions appointed by and serving at the pleasure of the governor. This "board of health" should have supervision of all matters relating to the public health. Rules and regulations adopted by the board for health protection of the population should supersede those of all other departments or other units of state and local government. (See Statement of Board of Governors regarding governmental reorganization.) (Approved R.C. IV)

(Committee on Rural Health)

15. With reference to Council on Medical Services recommendation number 18, 1968 House of Delegates, that the Association, the state's medical schools and all other appropriate organizations investigate new methods and innovations to provide health care for persons in rural areas by greatly increasing the number of family physicians and recruiting them for rural practice.

16. That the following resolution be approved and adopted:

Whereas, the Slow-Moving Vehicle (SMV) emblem has aroused national interest because of its potential for identifying, on public roads, slow-moving vehicles with speed capabilities of less than 25 miles per hour, which include vehicles such as farm tractors and other farm vehicles, road maintenance and construction equipment, and horse-drawn vehicles; and

Whereas, the SMV emblem, developed from research at the Ohio State University, is a 14-inch equilateral triangle with a fluorescent orange center for daytime visibility and a reflective red border for nighttime, which when properly mounted on the center rear of a vehicle, two to six feet from the ground, can be seen and identified from 500 feet or more, both day and night; and

Whereas, the American Society of Agricultural Engineers and the Society of Automotive Engineers have developed specifications for physical properties, dimensions, component materials, and use of the emblem; and

Whereas, the board of directors of the National Safety Council approved a policy statement on the SMV emblem which formally confirms full Council support for the promotion and use of the SMV emblem, urges that every effort be made to encourage emblem use on slow-moving vehicles, and to educate the public to recognize it as identifying a slow-moving vehicle; and

Whereas, even though a number of states have passed enabling legislation on the use of the emblem and progress is being made, increased emphasis is needed to secure national adoption and use of the emblem; therefore be it



RESOLVED, that the Florida Medical Association officially endorse the SMV emblem and the objectives for which it stands; and be it further

RESOLVED, that the Florida Medical Association, in cooperation with county medical societies, promote the use of the emblem on slow-moving vehicles and help to educate the public to recognize it as identifying these vehicles.

17. That instruction in emergency health measures be made available through schools, 4-H clubs, Future Farmers of America chapters and other rural groups, in order that at least one person in each family knows emergency self-help.

18. That the Association and the component county medical societies take a leadership role in finding a solution in all parts of the state to the problem of inadequate ambulance service.

19. That defensive driving courses be recommended for all drivers insofar as possible, and that such instruction be included in all driver training courses.

20. That all "ham" and citizens band radio operators have a definite linking for emergency medical purposes with radio systems of county sheriffs, the Florida Highway Patrol and nearby local police.

21. That counties or groups of counties be encouraged to purchase or lease helicopters for multiple uses, including transportation of ill or injured persons to hospitals, police work, mosquito control, and physical removal of obstacles to highway travel.

22. That all former military medical corpsmen living in rural areas be located and encouraged to update their training for volunteer availability for medical help until physicians are present.

23. That the federal migrant agricultural workers' health program be continued and expanded, with sufficient funds to provide more adequate reimbursement of local practicing physicians for staffing evening medical clinics. It is further recommended that more adequate federal financing be made available to pay for hospitalization of agricultural migrants and to compensate physicians for the care of migrants during hospitalization.

Council on Voluntary Health Agencies

Dr. Murray: "The Reference Committee recommends adoption of the report of the Council on Voluntary Health Agencies as printed in the Handbook."

Motion carried.

Council Report

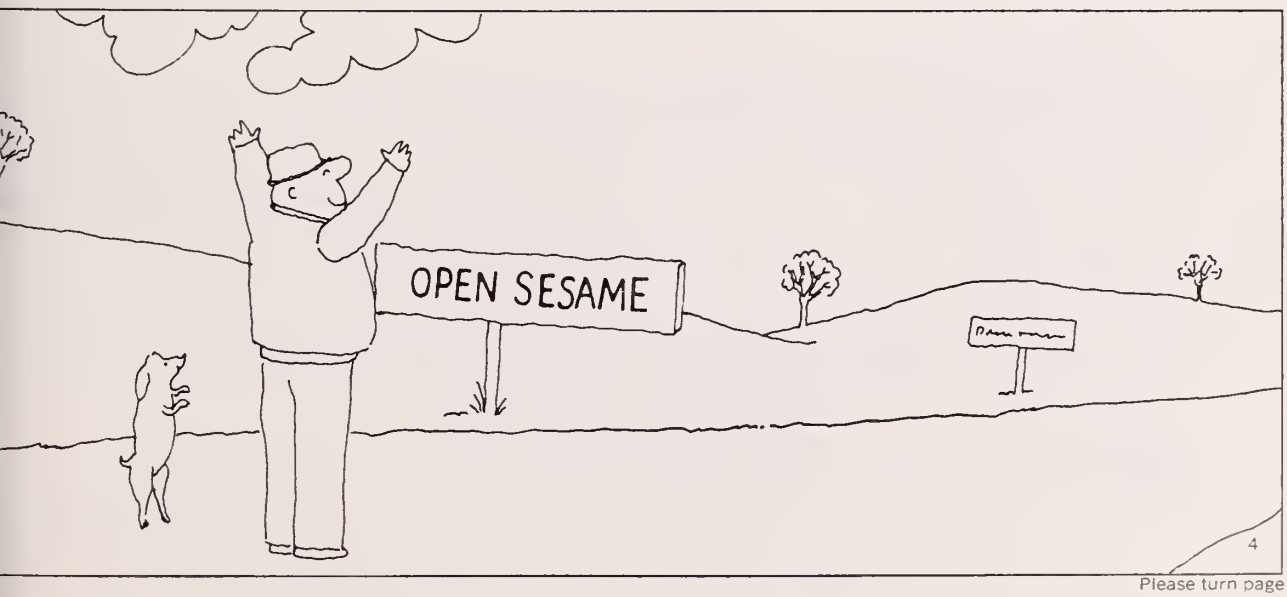
HAWLEY H. SEILER, *Chairman*

Official meetings of the Council were held May 4, 1968 and February 22, 1969. The former meeting was devoted to planning and implementation of practically every facet of the Council's activities, while the latter session primarily was for the Council's annual joint conference with the executive directors of recognized Florida voluntary health agencies. An additional meeting is scheduled for May 3, 1969.

Although there are no new recommendations made in this report, the Council remained quite active during the year in concerning itself with a variety of subjects related to its basic purpose of maintaining close liaison with voluntary health agencies and assuring adequate medical participation in their programs in the public interest.

The brief summary of the Council's 1968-69 activities which follows is presented by general subject area.

Recognition Program—With emphasis upon the medical aspects, the programs of the eleven statewide voluntary health agencies officially recognized by the Association were carefully reviewed and re-evaluated, as is the annual



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custom. A format for submission of information required for annual re-evaluation was developed and placed in use early in 1969. No reasons were found for recommending withdrawal of recognition for any of the eleven, but several which furnished inadequate information were warned that their recognition might be jeopardized. One application, that of Leukemia Society of America, Inc., is under study. A lengthy conference was held with national and state representatives of the Leukemia Society as part of the May 1968 meeting of the Council. Of the Florida voluntary health agencies considered of statewide scope, only one has not applied for recognition to date. One other applied a number of years ago, but did not pursue the application when requested to furnish additional data. The following organizations currently are recognized:

Florida Chapter, Arthritis Foundation
Florida Society for the Prevention of Blindness
Florida Division, American Cancer Society
United Cerebral Palsy of Florida
Florida Society for Crippled Children and Adults
Florida Heart Association
Florida Association for Mental Health
National Multiple Sclerosis Society
The National Foundation
Florida Association for Retarded Children
Florida Tuberculosis and Respiratory Disease Assn.

Liaison with Agency Executive Directors—As indicated earlier, the Council held its annual joint conference with the executive directors of recognized agencies February 22, 1969. Among the many subjects discussed were United Funds and United Health Foundations and their effects on the voluntary health movement. Comprehensive Health Planning and Regional Medical Programs, education of practicing physicians in voluntary health activities, the role of voluntary health agencies in stimulating county medical society programs, and the medical implications of government reorganization in Florida.

Florida Voluntary Health Association—The Council maintained close liaison with the Florida Voluntary Health Association, the joint state coordinating body formed in 1966. The association undertakes such beneficial activities for the voluntary agencies as the following: legislative action, preparation of a directory of Florida health services and organizations, sponsorship of educational programs including the annual Institute for Voluntary Health Agencies, and encouragement of similar local coordinating groups. The association was relatively inactive during the past year but the Council has encouraged greater activity in several areas.

County Medical Society Programs—During the summer of 1967, the Council mailed a brochure of materials to all Florida county medical societies. The purpose of the brochure was to encourage local societies to undertake similar programs to that of the state association. In response to the mailing, some ten societies notified the Council of the names of chairmen of committees which had been given this responsibility. It was decided to continue this encouragement by sending these materials annually to county medical society presidents.

Charitable Solicitations Act—The Council continues to be represented in the membership of the Secretary of State's advisory committee for administration of this law. One continuing problem, to which there appears to be no answer, is the existence of mail solicitation originating out of state.

United Funds—During the year the Council has maintained continuing study of the medical programs of United Funds-United Health Foundations on national, state, and local levels, with particular emphasis upon the effects of these programs upon the entire voluntary health movement.

Comprehensive Health Planning and Regional Medical Programs—The Council has further studied and will continue to maintain surveillance over the possible effects of Comprehensive Health Planning, Regional Medical Programs and other federally financed health programs upon the voluntary health agencies.

AMA Program—Close relations have continued between the American Medical Association Council on Voluntary Health Agencies and the FMA Council through the membership on the AMA Council of the immediate past chairman of the FMA Council.

Board of Governors Actions

Action No. 5. Highway Evacuation and Treatment.

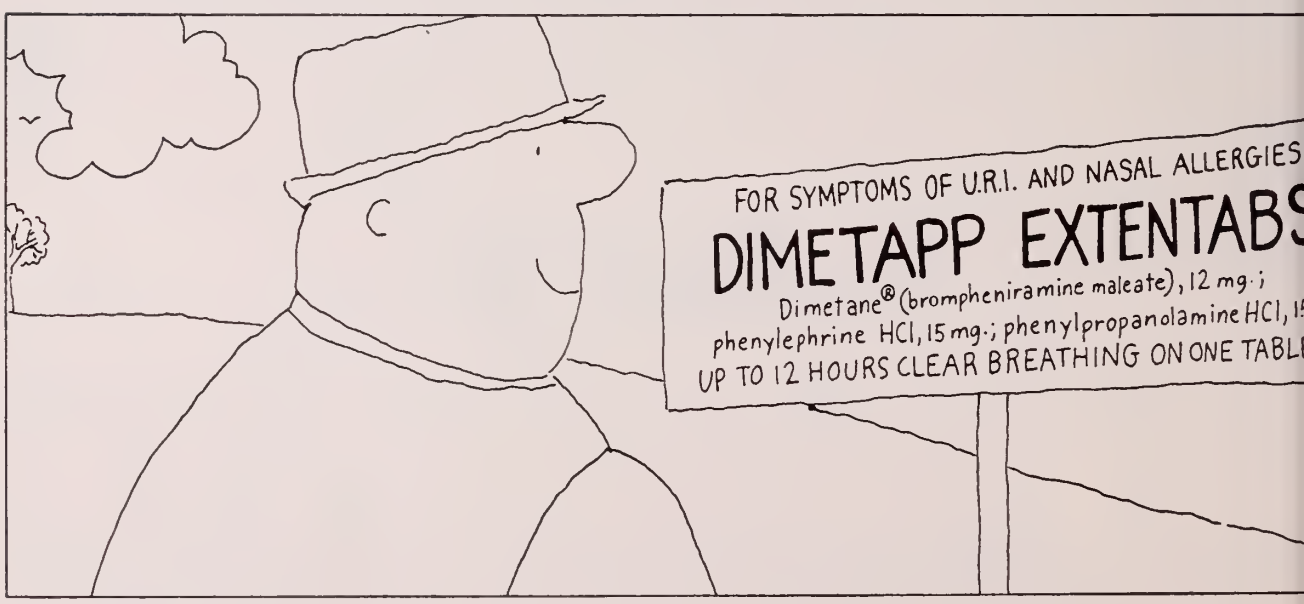
Dr. Murray: "The Reference Committee recommends approval of this action as printed in the Handbook."

Motion carried.

(See Board of Governors report, page 512)

Action No. 10. Allied Health Personnel.

Dr. Murray: "The Reference Committee recommends approval of this action as printed in the Handbook."



Motion carried.

(See Board of Governors report, page 512)

Action No. 16. Health Manpower.

Dr. Murray: "The Reference Committee recommends approval of this action as printed in the Handbook."

Motion carried.

(See Board of Governors report, page 512)

Action No. 21. Hunger.

Dr. Murray: "The Reference Committee recommends approval of this action as printed in the Handbook."

Motion carried.

(See Board of Governors report, page 512)

Action No. 25. Pediatric Advisory Committee.

Dr. Murray: "The Reference Committee recommends approval of Action No. 25 of the Board of Governors report.

Motion carried.

(See Board of Governors report, page 512)

Action No. 28. Teachers Contracts-FEA.

Dr. Murray: "The Reference Committee recommends approval of Action No. 28 of the Board of Governors."

Motion carried.

(See Board of Governors report, page 512)

Resolution 69-10
(Substitute)

Lafayette County Health Project
Duval County Medical Society

Dr. Murray: "The Reference Committee considered resolution 69-10 and offers the following substitute resolution:

"Whereas, the Duval County Medical Society feels that although the Community Health Program in Lafayette County is currently performing useful service to the people of that county, it was started without consultation with the Committee on Medical Schools of FMA, and

Whereas, in the original outline it did not:

1. Provide for licensed medical personnel in supervisory and responsible positions.
2. Incorporate the general practitioner in surrounding counties in the original organizational structure.
3. Provide the patient free choice of physician or hospital should referral be necessary.
4. Allow the supervisory physician and surrounding county family practitioners to participate in the determination of fee for service.

Therefore, be it

RESOLVED, That the House of Delegates approve the program; and be it further

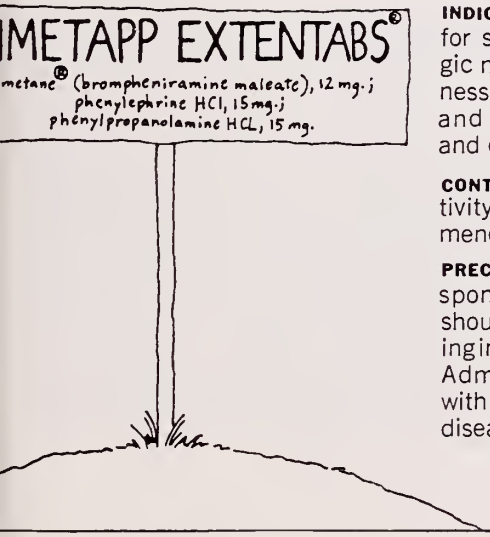
RESOLVED, That the House of Delegates requests the University of Florida through the Department of Ambulatory and Community Medicine to seek the advice of the existing Medical School Advisory Committee on all programs of this type; and the Department of Ambulatory and Community Medicine of the University of Florida incorporate these suggestions in the professional administration of the Lafayette County program and use these suggestions for any future programs of this type."

"Mr. Speaker, the Committee recommends the adoption of substitute resolution 69-10."

The Speaker asked Dr. Murray if this would conflict with the action that the House has already taken and Dr. Murray replied that it would not.

Dr. Joseph G. Matthews called attention to the fact that this added only one item that was not contained in the former action—a provision for some control of fees. He said this was merely an addition to the previous report and did not conflict.

Motion was carried to approve the substitute resolution.



INDICATIONS: Dimetapp is indicated for symptomatic relief of the allergic manifestations of respiratory illnesses, such as the common cold and bronchial asthma, hayfever and conjunctivitis.

CONTRAINDICATIONS: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.

PRECAUTIONS: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

SIDE EFFECTS: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.

DOSAGE: 1 Extentab morning and evening.

SUPPLIED: Bottles of 100 and 500.

A·H·ROBINS A. H. ROBINS COMPANY RICHMOND, VIRGINIA 23220

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Resolution 69-23

Dr. Murray: "The Committee considered resolution 69-23 and recommends that it be amended as follows:

"In the first 'Resolved', second line, the words 'a registered professional nurse,' be deleted and in their place insert the words 'non-medical personnel.'

"In the third 'Resolved,' first line, the word 'nurses' be deleted and in its place the words 'non-medical personnel' be inserted."

Dr. James R. Jude called attention to the second "Resolved," which also contained the words "registered professional nurses" and moved that these words should be replaced with "non-medical personnel" wherever they appear in the resolution. Dr. Murray accepted this additional amendment.

Motion was carried to approve these amendments to the resolution.

Motion was carried to approve the resolution as amended.

Board of Governors
To
House of Delegates

JOINT STATEMENT ON CARDIOPULMONARY RESUSCITATION

Whereas, A substantial number of persons die from sudden and reversible cause, and

Whereas, A maximum of four to six minutes may elapse from time of sudden death to onset of irreversible brain damage; therefore, be it

RESOLVED, That in any emergency situation in the absence of and until a physician can take over, non-medical personnel, properly trained in the technique, may initiate the procedure of cardiopulmonary resuscitation; and be it further

RESOLVED, That it is agreed the procedure of cardiopulmonary resuscitation is primarily a medical procedure and, therefore, the decision to delegate the responsibility in an emergency situation to non-medical personnel must be assumed by the medical board and/or a comparable body of an individual hospital or agency; and be it further

RESOLVED, That in order to insure that non-medical personnel are adequately prepared to carry out the procedure, hospitals and agencies should provide ongoing training programs on cardiopulmonary resuscitation under the direction of a physician.

Resolution 69-24

Plasmapheresis (Action deferred to R.C. IV)

Dr. Murray: "Mr. Speaker, there was one resolution that was inadvertently left out of the report and that is resolution No. 69-24 on Plasmapheresis. Your Reference Committee recommends approval of this resolution with the deletion in the third line of the words 'placed before the next assembly meeting.'"

Motion to strike the words "placed before the next assembly meeting" was carried.

Dr. M. Eugene Flipse called attention to the Report of Reference Committee No. IV, which also contained a recommendation on Plasmapheresis.

Motion was carried to defer further action on this resolution until the subject was considered in Reference Committee IV.

Dr. Murray: "Mr. Speaker, I wish to extend thanks to all the members of my committee who considered these questions, Dr. Brown, Dr. Clay, Dr. Maxwell and Dr. Butcher, and especially the patience and perseverance of the secretarial staff, which was headed in our case by Miss Lois Meyer.

Report of Reference Committee No. III
Finance and Administration

Dr. Edward W. Cullipher, Chairman: "Your Reference Committee on Finance and Administration has considered each of the items referred to it and desires to present the following report. The reference committee's recommendations on each item will be submitted separately and I respectfully suggest that each item be acted upon before going on to the next."

Report of Board of Governors and Supplemental Report

Dr. Cullipher: "The Reference Committee considered the report of the Board of Governors and the Supplemental Report and recommends acceptance of those portions of the report referred to Reference Committee No. III, and acceptance of the Supplemental Report of the Board of Governors."

Dr. John J. Fisher, Duval: "I would like to offer an amendment to the committee report—to omit the By-Law change to Chapter X, Section 2, Dues, which would increase annual dues to $75.00 for active members.

"The other day I went before Reference Committee III, although after being a member of this body for six years, I knew the futility of opposing any action the Board of Governors wished. This is probably the last year I am going to be here, and I would like to say that the Board of Governors is not the FMA, nor is this body the FMA. The FMA is the 5,400 members who sent us here to represent them.

"No individual or group of individuals should be above criticism, especially when it is directed in a constructive manner. When I appeared before the reference committee, I took up each reason listed in this Handbook in a logical fashion, showing that there was no justification to raise the dues. The membership of this body, and it is practically compulsory to be a member of the FMA to practice medicine in Florida, is being taxed to pay the expenses of the elected officials who are doing this on a voluntary basis. We had last year a reserve of some 14% above our expenses, and the anticipated budget for next year is above anticipated expenses, even with $10,000 for the reserve fund. We haven't lost our tax exempt status and we haven't lost Mr. Gray yet, although these are given as reasons for the raise. Without going into detail, I discussed this with two members of the Board of Governors. One of them said that doctors should not object to paying $75 when plumbers pay $600. But members of this House, the plumbing trade has had to fight for everything it has. The physician enjoys a very fine reputation that shouldn't cost him anything to maintain except performance of his duty



Reference Committee III consisted of (left to right) Drs. William C. Roberts, Panama City; Abbott Y. Wilcox Jr., St. Petersburg; Edward W. Cullipher, Miami (Chairman); J. Russell Forlaw, Boynton Beach, and Nelson Zivitz, Miami Beach. Mrs. Wanda Bain was recording secretary.

and a good image to the public.

"But what happened next—a member of that reference committee, although he said he was not speaking as a member of the committee—nevertheless he was up there on the podium—got up and looking at me, since I was the only one opposing this thing—and said that any physician who opposed this increase was a 'piker' and inferred that he was cheap.

"If that member serves the next 50 years on a reference committee—and God forbid—he will not contribute as much as I have in the last 15 years in South America, Central America, Duval County and Tallahassee.

"What I want the Board of Governors to do, and this was the point I was trying to make in the reference committee the other day—to give us reasons which we, as responsible delegates to FMA, can say 'these are the reasons we are raising dues, we are going to give you a progressive anti-malpractice program; we are going to accomplish this in the field of legislation'—which the FMA has not done. We lost the best man we ever had in Tallahassee, Dr. Haskell, for reasons I am fairly certain of and I know you lost Jack Peeples, who was the most effective voice you ever had in the Capitol, because he got no cooperation from the governing body of this organization.

"So come back next year and give us a positive program of reasons for raising the dues and when you do this, put it in a reference committee no member of which will get up and call any member of this association a piker or cheap."

Dr. Irving A. Beychok, Sarasota: "The word was cheapskate and I think it was extremely inappropriate. I would like to point out one thing that is essential. Of all the reasons given in the Handbook, the reason then given after Dr. Fisher got up was not included, that we needed more secretarial and other types of employed help. It is very strange to me that this reason was not included in the Handbook."

Dr. George S. Palmer, Past President: "First, I want to assure Jack Fisher, I think he is a good guy. I have come to respect him and admire him.

"Certainly we are not above criticism and we accept your criticism. If we have been remiss in pointing out many areas we have considered, including such a type of anti-malpractice program, we can't possibly tell you everything that has gone on. Speaking of just legislation, I believe he is in error when he says Jack Peeples did not have cooperation from the Board of Governors. He quit simply because we could not pay him enough. We have an equally good representative in Robert Folks, who is doing it on a pittance. For that alone we need this dues increase. We had some difficulties in our legislative efforts in Tallahassee this year, but they were purely on the basis of lack of money."

Dr. Reuben B. Chrisman, AMA Delegate: "I would like very much to have Dr. Floyd Hurt, our Treasurer, clarify this a little bit because he above all others, including the Board of Governors, knows why we must have this dues increase."

Dr. James R. Forlaw, Palm Beach: "I was the person who made the statement referred to by Dr. Fisher. I would like to apologize publicly to Dr. Fisher if he took my remarks as directed personally toward him. Also, these remarks were as an individual member of the Association and not as a member of the reference committee. I feel that this Association can operate in a more effective manner with a better financial structure and more money. I still stand on the statement—and it was not directed personally to anyone—that doctors, overall, are pikers."

Dr. Floyd K. Hurt, Secretary-Treasurer: "I attended Reference Committee No. III and I substantiated all the reasons given in the Handbook. It is not easy to be specific about certain items which we would like to put in the budget for next year. There are certain things you are going to have to recognize; that if we do a lot of things that are asked for by our committees or councils, it takes money to do them.

"We do need a more positive legislative program, and as Jack Fisher knows, we intend to try to relieve some of the problems that are badgering physicians now on professional liability. There are other things, because each year additional programs come up through the different councils and committees.

"One of the items given in the Handbook was that the FMA be responsible for the billing of dues for the county medical society members. This is something that in the past we have always asked the county medical societies to do—to bill and collect the FMA dues. It could be done through the office in Jacksonville and would save a lot of time and expense for the county societies.

"If there is anything specific you want to know, I will try to answer your questions."

Dr. Fisher asked the amount of the reserve fund at the present time and Dr. Hurt replied that it was in excess of $100,000.

Dr. Jim C. Hirschman, Dade: "Before we vote on this, I feel we should have a chance to

see the budget and the proposed budget."

Dr. Cleveland: "There are two things that are coming up immediately. If you want your Association to have the up-dating of the Relative Value Study, this costs money. Also, we are now in the middle of a controversy with the Industrial Commission. In fact, we have petitioned them and there is a good chance there will be a lawsuit. This is not done for pennies. This is not something that came up out of the blue to get more money. We are either going to stand still or we are going forward. We are going to have to have more money if you want your Association to progress and if we are to do all of the things that are suggested. It is all right with the Board of Governors if you vote this down—it is fine. But we have to present to you what we think it takes to make a more progressive medical association."

Dr. Carl N. Reilly, Charlotte: "If you read the President's Page in the Journal, the last one, you will see there are a number of problems that simply are not predictable. This Association is our protagonist in these little battles. If we are going to strip this hard-working Board of Governors of any possible funds and make them come back to this House, we may find ourselves with a sudden medical-political crisis, during the next year, in which lack of money might cost all of us very dearly."

Dr. Sol Center, Dade: "I think every member is entitled to know what the proposed budget will be. I do not think that flashing some figures on the screen gives anybody time to study them."

Dr. James W. Walker, Duval: "I speak in favor of the Board of Governors recommendation to increase the dues. This is not a lot of money for any one member of this Association to pay. I doubt if the members have any idea of the many man hours and personal financial contributions made by members of the councils and committees."

Dr. David C. Lane, Broward: "I would like to reiterate some of the points that have been made. First of all, it is very likely we are going to lose our tax exempt status; we do have expensive lawsuits in the offing; the Relative Value Studies; the Industrial Commission suit. Most important of all, we have got to have representation in Tallahassee. I am up there 60 days every year, and I have worked with Ed Haskell, George Palmer, Al James, etc. Now we are faced with formidable opposition from the chiropractors, the podiatrists, the optometrists, etc. to the point that our staff in Tallahassee cannot service both sides of the Legislature. We have to have a man in the House and a man in the Senate. There is so much health and welfare legislation simultaneously in both chambers, it is impossible for our lobbyist to be in both places at the same time. Ed Haskell had to give up his practice to be over there full time to help out. John Fisher is gone from the Senate and I am alone up there. I feel very lonesome when the chiropractors come up there with highly paid staff to argue against our position, and the same way with the podiatrists, who hire Perry Odum from Jacksonville, a highly competent fellow. Bob Fokes, our attorney now, gets paid $200 a month to represent us. Any of you who have attorneys—legal problems—know how much help you can get from your lawyer for $200 a month."



Attending the Board of Past President's breakfast were: (standing from left) Drs. Warren W. Quillian, W. Dean Steward, George S. Palmer, Leo M. Wachtel, Joseph S. Stewart, Samuel M. Day, John D. Milton, Jere W. Annis, (seated from left) Francis H. Langley, Edward Jelks, William C. Roberts, William C. Thomas Sr. and Walter C. Jones.

Dr. Vincent P. Corso, Dade: "With full confidence in our Board of Governors, I move the question."

Motion seconded and carried.

The Speaker explained that the vote would be on the amendment proposed by Dr. Fisher—to delete the recommendation of the Board of Governors for a dues increase.

The motion was defeated.

Motion carried to approve the Board of Governors report and its supplemental report, except for those portions referred to other reference committees.

Board of Governors Report

JACK Q. CLEVELAND, *Chairman*

The Board held four meetings during the Association's administrative year. They were held on May 12 and October 3-4, 1968, and January 12 and March 30, 1969. The Executive Committee of the Board held five meetings and one telephone conference during the year.

The Chairman wishes to express his sincere appreciation to the officers, the members of the Board of Governors, the Council and Committee Chairmen, and all individual members of the Association for their interest, concern, and achievements of the past year. It was a deep personal privilege and satisfaction to have been closely associated with so many outstanding physicians who make our Association one of the finest in the nation.

MAJOR ACTIVITIES

Annual Meeting—The Board of Governors approved the format for the 1969 annual meeting and revised scientific program as submitted by the Committee on Scientific Assemblies, which is being sponsored in cooperation with various specialty groups. The 1968 annual meeting was carefully reviewed and an attempt has been made to improve the format for the House of Delegates. It was noted that 2,210, of which 1,273 were physicians, attended this meeting. The Board observed the decline in technical exhibits income and urges each member attending the meeting to visit with the technical exhibitors.

Presidents' and Secretaries' Conference—The Eleventh Annual Conference of Presidents and Secretaries of County Medical Societies was held in January 1969 in Orlando. Again this year, the purpose of the conference was to orient the officers of the county medical societies regarding major programs and activities of the Association, to better facilitate their programming and implementation at the county level. The Conference was received enthusiastically by the county society representatives, and over 90% of the membership was represented by their respective county society officers.

Financial Statement and Budget—The Board reviewed the financial statement prepared by the Secretary-Treasurer and the Executive Director, and the auditor's statement prepared by the Association's certified public accountant for the Association's fiscal year, which was the calendar year 1968. The Association had an income from all sources of $380,343; expenses incurred were $333,695, for a gross excess of income over expenses of $46,648, which did not include funds expended for equipment and interest paid as they were picked up under fixed assets of the Association. The Board approved an annual operating budget for the calendar year 1969 in the amount of $371,000, which included $10,000 for reserve. Your Board further authorized expenditures this year which were not budgeted and to come from the reserves of the Association for the preparation of petition and possible lawsuit with the Florida Industrial Commission and retention of a consultant to assist with the updating of the FMA Relative Value Studies, the approximate cost of which will be $30,000. A suit against the FMA which the osteopaths have brought for a violation of the Sherman Anti-Trust Act, which included punitive damages, will be an additional expense of the Association this year which will have to come from its reserves.

In compliance with the By-Laws, this budget was prepared by the Executive Director after consultation with the Secretary-Treasurer, reviewed by the Executive Committee, and approved by the Board of Governors. It was based upon an anticipated income of $371,000. Copies of the CPA audit are on file at the Association's office and available for review by the members of the Association.

Appointments—The Board of Governors appointed Rueben B. Chrisman Jr., M.D., as the AMA Delegate to serve on the Board of Governors; Eugene G. Peek Jr., M.D., as the State Board of Health representative on the Board of Governors; approved appointment of William M. C. Wilhoit, M.D., as the optional member of the Executive Committee; George S. Palmer, M.D., as Public Relations Officer; appointed Franz H. Stewart, M.D., as Editor and Oscar W. Freeman, M.D., and Clyde M. Collins, M.D., as Assistant Editors; appointed Richard M. Fleming, M.D., as Assistant Editor from the Board of Governors; reappointed the Committee on Research members with Donald W. Smith, M.D., as chairman; reappointed the Subcommittees on Inter-American Relations, Quackery, Venomous Snake Bite and Investment Plan Committee. The Board appointed two ad hoc committees, one on Comprehensive Health Planning, chaired by Samuel M. Day, M.D., and Regional Medical Program, chaired by H. Phillip Hampton, M.D., to serve on a temporary basis and to recommend to the House of Delegates a change in the By-Laws to make them standing committees under the appropriate council. The Board also appointed an ad hoc committee on Allied Health Personnel to concern itself with recommendations regarding the training and licensure of individuals from the paramedical field, chaired by James W. Walker, M.D., of Jacksonville. The Board approved the President's appointments of a special committee on Workmen's Compensation to work with legal counsel in the preparation for the administrative hearing and possible litigation, chaired by Joseph G. Matthews, M.D., of Orlando. A special committee on recommendation of the implementation of Title XIX was appointed, chaired by Jere W. Annis, M.D., of Lakeland. The Board appointed an ad hoc committee to promote a modern medical examiners system in Florida composed of the physicians currently serving as county medical examiners; the work of this committee to be coordinated with that of the Association's Committee on State Legislation.

Recognition—The Board reviewed the nominations received from county medical societies and selected the recipient for the A. H. Robins Company Award "For Outstanding Community Service by a Physician" to be presented at the first meeting of the House of Delegates, May 15, 1969 (Award nomination will be included in the delegates' packets).

NOMINATIONS

Certificate of Merit—Your Board recommends that Eugene G. Peek Jr., M.D., of Ocala, be awarded the Association's highest award, the Certificate of Merit (Complete nomination to be included in the delegates' packets).

Certificate of Appreciation—Your Board recommends that Thad Moseley, M.D., of Jacksonville, be awarded the Association's Certificate of Appreciation (Complete nomination will be included in the delegates' packets).

Committee on Membership and Discipline—As provided for in the By-Laws, the Board of Governors nominates the following physicians for those terms expiring in 1969:

District 1:
Earl Wolf, M.D., Pensacola
District 5:
Theodore J. Kaminski, M.D., Melbourne

District 6:
Henry L. Wright, M.D., Tampa
District 8:
Jack A. MaCris, M.D., St. Petersburg
District 10:
Robert J. Brennan, M.D., Fort Lauderdale
District 12:
Richard M. Fleming, M.D., Miami Beach

Blue Shield Board of Directors—The Board of Governors reviewed the nominations for the Blue Shield Board of Directors presented by the Blue Shield Nominating Committee and from the nominations for each physician directorship the following were chosen:

Medical District A:
Leo M. Wachtel, M.D., Jacksonville
Edwin H. Updike II, M.D., Ocala
Medical District B:
William J. Dean, M.D., St. Petersburg
Francis L. Merritt Jr., M.D., Lakeland
Medical District C:
W. Dotson Wells, M.D., Ft. Lauderdale
Vann Parker, M.D., Sanford
At Large:
William W. Thompson, M.D., Fort Walton Beach
Robert L. King Jr., M.D., Pensacola

The lay members nominated by the Nominating Committee were approved by the Board as follows:

Medical District A:
Ben C. Willis, Tallahassee
Medical District B:
John A. Turner, Lakeland

State Agencies—Your Board made numerous recommendations to the Governor for appointment of physicians on various boards, including the State Welfare Board, the State Board of Health and the Governor's Highway Safety Commission.

REFERRALS BY HOUSE OF DELEGATES

The Board of Governors reviewed the entire proceedings of the 1968 House of Delegates and referred every item needing study or action to appropriate committees and councils of the Association and implemented the policy itself where appropriate. The individual actions regarding the policies of the House of Delegates appear in the various council reports as well as in this report.

BOARD ACTIONS OF MAJOR IMPORTANCE

1. Lawsuit—Your Board of Governors carefully reviewed with the Association's legal counsel and representative from the AMA Law Department the suit against Jackson Memorial Hospital in Dade City and the individual members of its medical staff regarding hospital privileges for the osteopaths bringing the suit and against the FMA for violation of the Sherman Anti-Trust Act. Your Board authorized the Association's legal counsel to proceed in defense of the suit, to obtain additional legal counsel, if necessary, and will make recommendations to the First Meeting of the House of Delegates regarding osteopathy.

The Board was advised that the lawsuit involving the Dade County Medical Association and the listing of physicians in the yellow pages of the telephone directory, in which suit the FMA had intervened, was lost in the Court of Appeal. In effect, the ruling would deny the right of a voluntary organization such as the medical society to regulate its membership.

2. Workmen's Compensation—Your Board authorized the Association's legal counsel to petition the Florida Industrial Commission for administrative relief and to adopt a fee schedule which will pay physicians' fees for services rendered in compliance with the provisions of the Florida Statutes; if relief is not obtained from the FIC, legal recourse be sought in the appropriate court and that appropriate specialty groups and individual physicians be permitted to participate in these proceedings. A special survey was conducted of the FMA membership regarding usual and customary fees. The first office visit was resurveyed to be more definitive. The surveys have been authenticated by an actuary retained by the Association at the time of this writing and is ready for submission to the Industrial Commission. (Approved R.C. V)

3. Relative Value Studies—Your Board approved the recommendation of the Council on Medical Economics to continue the Relative Value Studies of the Association and authorized the expenditure of funds to retain a consultant to assist with this program. (Approved R.C. V)

4. Improved Communications—Your Board authorized and requested the Florida Medical Foundation to seek a grant from nongovernmental sources to develop a scrambled television network and video tape presentations to keep the membership informed on current scientific data and possibly legislative and socioeconomic matters. One thousand dollars has been received towards this project from Mrs. Jesse Ball DuPont who has it under consideration for additional funds. Approaches are also being made to other major foundations to assist with the implementation of this project. A method other than scrambled television network and video tape presentations should be explored since it appears that from a practical standpoint these methods have not been satisfactory. (Amended R.C. I)

5. Highway Evacuation and Treatment—Your Board requested the Foundation to seek a grant to study the implementation of a modern Highway Evacuation and Treatment Program for the state of Florida. It was necessary to revise the original application and utilize the State Board of Health as the grant recipient. The State Board of Health will contract with the Foundation regarding certain consultative services. This proposal has been approved by the appropriate authorities, and at the time of this report is awaiting funding. (Approved R.C. II)

6. Governmental Reorganization—Your Board carefully reviewed the progress and recommendations being made by the appropriate Senate and House committees of the Florida legislature regarding government reorganization, which was a mandate of the revised constitution of the state. Your Board adopted two statements of policy, one dealing with the Department of Health Services and the other with Regulatory Boards. These appear as Resolutions #69-20 and #69-21. Your Board further recommended an aggressive program for adoption of these recommendations by the Florida legislature. (Approved R.C. IV)

7. Medicare—Your Board requested the Foundation to enter negotiations with Blue Shield of Florida, Inc. to contract for the services of physicians to provide peer utilization and review of Medicare claims. (Amended by R.C. V)

8. Title XIX—Your Board appointed, approved recommendations of, and dismissed an ad hoc committee on the Implementation of Title XIX in Florida. The recommendations adopted included that a Title XIX program be implemented in Florida as soon as possible consistent with adequate planning and efficient functioning of the program; that reimbursement of physicians and operation of the program be under the same mechanism and regulations as are currently in effect under Title XVIII which would include usual and customary fees for physicians' services; and that careful consideration be given to contracting with an independent insurance agency to underwrite the medical services rather than a state agency acting as its own fiscal administrative agent. (Approved R.C. IV)

9. Specialty Societies—Your Board granted recognition to the Florida Industrial Medical Association and the Florida Association of Pediatric Surgeons. (Approved R.C. I)

10. Allied Health Personnel—Your Board reaffirmed the FMA's position that allied health personnel be under the control of the Board of Medical Examiners, be licensed by the Board of Medical Examiners and that a provision be included in the law that they must work under the direct supervision of physicians. (Approved R.C. II)

11. AMA Board of Trustees—Your Board approved nomination and support of the re-election of Edward R. Annis, M.D., to the Board of Trustees of the AMA in July 1969.

12. Annual Meeting Location—Your Board authorized the Executive Director to explore the possihility of holding the annual meeting at the Fontainehleau Hotel in 1975.

13. Comment hy Reference Committee I on Item 13—The Reference Committee considered Action No. 13 with the recommendation that if a joint commission on medical education is formed consisting of Florida Medical Association and Board of Regents memhers, then the Association's Committee on Medical Schools will not he necessary.

Board of Regents—At the request of the Chancellor of the Board of Regents for nominations of memhers to serve on a medical advisory committee to the Board of Regents, your Board nominated the memhers of the Association's Committee on Medical Schools with the exception of the Deans of the Medical Schools, plus the medical advisory committees to the three medical schools. (R.C. I)

14. HEW—Your Board requested the Board of Trustees of the AMA, through the appropriate individuals, to approach Mr. Richard Nixon regarding the reorganization of Health, Education and Welfare and for health activities in this department or a separate department to he headed hy an appropriate doctor of medicine and that positive recommendations be made regarding this individual. (Approved R.C. V)

15. Blue Shield—Your Board authorized the institution of a trust agreement to provide group Blue Shield and Blue Cross coverage to memhers of FMA and their employees, provided that any county medical society that does not wish to participate could continue its present coverage. (Approved R.C. V)

16. Health Manpower—Your Board approved the Association's participation in the Florida Health Manpower Council. (Approved R.C. II)

17. Civil Rights—Your Board approved the recommendation of the Judicial Council to estahlish the policy that compliance with the Civil Rights Act of 1964 has nothing to do with medical ethics.

18. Hospital Boards—Your Board reviewed the status of the survey being conducted hy the Association regarding doctors of medicine serving on hospital hoards and infringement upon medical staff prerogative by trustees of certain hospitals. (Approved R.C. V)

19. Inter-American Relations—Your Board reaffirmed the policy regarding the Honduran project wherehy the Association should not become involved in a program treating Honduran patients until it is formally invited to do so hy the Colegio Medico De Honduras, and such invitation should be accompanied hy a provisional license to practice medicine and surgery in Honduras in accordance with the laws of that Repuhlic.

20. Florida Clinical Laboratory Act—Your Board approved a special report which had heen requested hy the Board regarding the proposed regulations to implement the Florida Clinical Laboratory Act. (Received as information R.C. IV)

21. Hunger—Your Board agreed to cooperate and assist the Governor of Florida and the State Board of Health in their study of the health conditions of the poor in Florida and requested the respective county medical societies to cooperate with the study if it were conducted. (Approved R.C. II)

22. Life and Death—Your Board referred to the Judicial Council and the Association's Committee on Religion for review and recommendations a resolution suhmitted to the Board of Governors regarding the medical, moral, ethical and legal aspects of the time of onset of life and death.

23. History of Medicine Museum—The Board reviewed a report whereas an excess of $1,600 had been contrihuted to the St. Augustine Historical Restoration and Preservation Commission for estahlishment of the History of Medicine Museum, St. Augustine, Florida. These donations came from the FMA, several county medical societies and individual physicians.

24. FLAMPAC—Your Board authorized the executive office to handle hookkeeping and administrative work for FLAMPAC at 1% of dues collected. The Association will continue its policy of not participating in any political campaign activities.

25. Pediatric Advisory Committee—Your Board designated the Association's Committee on Child Health to assume an additional duty of serving as the Pediatric Advisory Committee to the State Board of Health. (Approved R.C. II)

26. Joint Commission on Accreditation of Hospitals—Your Board sent representatives to appear before the Joint Commission on Accreditation of Hospitals, which was considering revisions of the standards for accreditation. (Received as information R.C. IV)

27. Lafayette County Project—Your Board adopted reports of the Council on Scientific Activities and the Council on Medical Services regarding the University of Florida Lafayette County Health Care Program as follows:

a. The Council on Scientific Activities acknowledges that this program has heen functioning since the heginning of the year and the Council expressed concern about the necessity for strict and close supervision in order to make it a valid educational experience and to avoid problems in the licensure and medicolegal areas. The Council expressed a need for more information concerning the methods for estahlishing fees for the program's services. Finally, the Council felt that participation hy nearhy physicians in the planning, administrative and teaching phases of the program was desirahle, and suggested that the universities he advised to consult outside groups before undertaking future activities in the field of community medicine.

h. The Council on Medical Services concurs with its chairman's previous opinion in finding no ohjection to this program, hut since this project is already in operation, it is recommended that:

1. One or more physicians in the general practice of medicine be involved in the teaching phase of this program, and
2. A representative of the Florida Medical Association he involved in the program at the administrative level. (Approved R.C. I—Also see Report of Council on Specialty Medicine and Resolution 69-10.)

28. Teachers' Contracts, FEA—Your Board approved a report of the Council on Medical Services dealing with the request from the Florida Education Association regarding teachers' contracts. (Approved R.C. II)

RECOMMENDATIONS

BY-LAWS—After careful consideration, the Board of Governors recommends to the House of Delegates the following amendments to the current By-Laws of the Florida Medical Association, Inc.:

The following By-Laws are amended to read as follows:

1. CHAPTER I, MEMBERSHIP; SECTION 2, CLASSIFICATIONS:

"Active Memhers shall he those Florida licensed doctors of medicine who are certified to the Association hy the several component society secretaries as unrestricted memhers in good standing, AND THOSE PROVIDED FOR IN CHAPTER XI, SECTION 3, ITEM 3."

(This allows a member of a county medical society transferring to another to retain his membership in the FMA while in the process of obtaining memhership in another component county medical society.)

2. Chapter IV, Section 15, paragraph 2, Reference Committee Composition—Reference Committees shall he appointed hy the SPEAKER, in consultation with the PRESIDENT, from the memhers of the House of Delegates. Each committee shall consist of five memhers, of which three shall constitute a quorum. These appointments shall he puhlished in the Handhook for Memhers of the House of Delegates and shall he announced at the first session of an annual meeting of the House of Delegates. The SPEAKER shall designate one memher of each refer-

ence committee as chairman. Officers and members of the Board of Governors shall not serve on reference committees, and the report of the Chairman of a Standing Committee or the Chairman of a Council shall not be referred to a reference committee of which he is a member.

Chapter IV, Section 17. Credentials Committee—The SPEAKER in consultation with the PRESIDENT, shall appoint three members of the House of Delegates to pass on credentials submitted by the delegates from the component societies. He shall designate one of the three as the chairman, who shall report at each session the number of delegates officially registered and whether a quorum is present.

Chapter VI, Section 7. Speaker of House of Delegates—The Speaker of the House of Delegates shall be elected by the House of Delegates from its membership and shall preside over all meetings of the House and shall determine the number and times it shall convene during any one meeting. In consultation with the PRESIDENT, the SPEAKER shall appoint a credentials committee and all reference committees and shall designate the chairman of each. It is the responsibility of the President to provide a presiding officer for the House of Delegates in the event the Speaker is unable to serve and a Vice Speaker is unavailable.

(These changes provide for the Speaker to appoint the Reference and Credentials Committees in consultation with the President—the reverse of the present By-Laws.)

3. Chapter VI, Section 6. Treasurer—The Association shall provide bond for the Treasurer in an amount determined by the Board of Governors. He shall receive all funds due the Association, and shall have the supervision of and responsibility for the fiscal affairs of the Association. He shall submit his accounts to an annual audit by a certified public accountant. He shall submit an audited report annually to the Board of Governors, WHICH SHALL PUBLISH AN ANNUAL FINANCIAL SUMMARY IN THE JOURNAL.

(This substitutes an annual financial summary to be published in the Journal rather than the entire C.P.A. Audit.)

4. Chapter VII, Section 2, paragraphs 2 and 3—The Board of Governors shall maintain an Executive Office adequate to administer efficiently and effectively the activities of the Association. It shall employ an EXECUTIVE VICE PRESIDENT and other personnel as required to direct and supervise the Executive Office. The EXECUTIVE VICE PRESIDENT shall be responsible to the Board of Governors, which shall define his duties and fix his compensation.

The Board of Governors shall approve an annual operational budget prepared and submitted by the EXECUTIVE VICE PRESIDENT in consultation with the Secretary and the Treasurer. In addition, a financial statement shall be presented at each meeting of the Board.

(This changes the Title of the Executive Director to Executive Vice President.)

5. Chapter VII, Section 6, paragraphs 2 and 3, Duties and Functions—The Executive Committee shall consider matters referred to it by the President or Board of Governors and shall report its findings and recommendations to the Board. All actions of the Executive Committee shall require the approval or ratification of the Board. This Committee shall be responsible for studying the needs and requirements of the Association and shall engage in long range planning, AND THE EXECUTIVE COMMITTEE SHALL ALSO SERVE AS THE FINANCE COMMITTEE.

The Executive Committee shall be the liaison between the Board of Governors and the Councils and Committees hereinafter outlined. It shall coordinate, direct and supervise the several Councils and Committees and shall receive from them reports and recommendations to be transmitted to the Board of Governors.

(This specifies that the Executive Committee shall serve as the finance committee—a custom which has been followed for a number of years.)

6. Chapter IX, Section 1, paragraph 2, The Council on Allied Professions and Vocations—Committees on Dentistry, Law, Medical Assistants, Medical Technologists, Nursing, OPTICIANS, Pharmacy, Physical Therapy and Rehabilitation, PODIATRY, Religion, Veterinary Medicine, and Radiological and Nuclear Medicine Technologists, and other paramedical personnel as approved by the Board of Governors.

(This deletes the word "therapists" at the end of the Committee on Physical Therapy and Rehabilitation; and, adds two new committees; the Committee on Opticians and the Committee on Podiatry.)

7. Chapter IX, Section 1, paragraphs 5 and 7, The Council on Medical Economics—Committees on Advisory to Blue Shield and Fiscal Intermediaries, Health Insurance, Hospitals and Extended Care Facilities, Members Insurance, Relative Value Studies, and COMMITTEE ON COMPREHENSIVE HEALTH PLANNING.

The Council on Scientific Activities—Committees on the Journal and Other Publications, Medical Schools, Postgraduate Education, Research, Scientific Assemblies, and COMMITTEE ON REGIONAL MEDICAL PROGRAM.

(This provides for Standing Committees on Comprehensive Health Planning and the Regional Medical Program.)

8. Chapter IX, Section 2, Standing Committee No. 5, Membership and Discipline—This Committee shall be composed of FOUR members of the Association from each Congressional District, elected for four year terms on a staggered basis by the House of Delegates annually from a slate of nominees presented by the Board of Governors and any additional nominations made from the floor.

(This changes the composition of this Committee from two to four members from each Congressional District.)

9. Chapter X, Section 2. Dues—Annual dues shall be assessed, as hereinafter provided, by the House of Delegates and shall currently be $75.00 per year for active members and $25.00 per year for associate members, except that medical interns and full time physicians in a residency approved by the local county medical society shall not be required to pay any annual dues. Included in all dues is an annual subscription to the Journal of the Florida Medical Association and one copy annually of the current Florida Medical Directory.

(This increases the dues for active members from $50.00 to $75.00 per year.)

10. Chapter XI, Section 3, Membership; Item 3, Transfers, paragraph 2—"If the component society into which he wishes to transfer requires a probationary period before acceptance into full membership, UPON CERTIFICATION BY THAT COUNTY SOCIETY THAT HE HAS BEEN ACCEPTED AS A PROBATIONARY MEMBER AND THAT THEY HAVE NO OBJECTIONS, HE MAY, IF HE WISHES, BE MAINTAINED AS AN ACTIVE MEMBER OF THE FLORIDA MEDICAL ASSOCIATION, PROVIDED HE HELD ACTIVE MEMBERSHIP IN THE COUNTY SOCIETY FROM WHICH HE IS TRANSFERRING AND IS AT THE TIME OF TRANSFER AN ACTIVE MEMBER OF THE STATE ASSOCIATION. This privilege is limited to a maximum of two years for any one transfer, as provided in Chapter I, Section 2, Item 3.

"IN THE EVENT THE COUNTY SOCIETY TO WHICH HE WISHES TO TRANSFER CANNOT ACT UPON HIS APPLICATION IMMEDIATELY AND SUCH DELAY WOULD RESULT IN A LAPSE OF STATE MEMBERSHIP, he may pay his Florida Medical Association and American Medical Association dues directly to the Association during this waiting period, provided the secretary of that component society certifies that he has applied and HIS APPLICATION CANNOT BE ACTED UPON IMMEDIATELY, SUCH PERIOD NOT TO EXCEED ONE YEAR."

(This allows a member of a county medical society transferring to another to retain his membership in the FMA while in the process of obtaining membership in another component county medical society.)

11. Chapter XIII, Rules of Order—The deliberations of the Association shall be governed by parliamentary usage as contained in STURGIS' STANDARD CODE OF PARLIAMENTARY PROCEDURE, unless otherwise provided in the Charter and these By-Laws, or unless waived or modified by a two-thirds vote of members present at any session of the general membership or meeting of the House of Delegates.

(This changes the use of Robert's Rules of Order to Sturgis' Standard Code of Parliamentary Procedure.)

12. Chapter IV, Section 6, Determination of Delegates; paragraph 2:

The President, President-Elect, Vice President, Secretary, Treasurer, Immediate Past President, Speaker of the House of Delegates, Vice Speaker, Past Presidents, MEMBERS OF THE BOARD OF GOVERNORS WHILE SERVING ON THE BOARD, Members of the Council on Specialty Medicine, delegates to the House of Delegates of the American Medical Association, and any member of the Association who has held the office of President of the American Medical Association shall be members of the House of Delegates with full rights and privileges.

(This provides for a member of the Board of Governors who is not otherwise eligible as a delegate to be seated during his tenure on the Board.)

OTHER RECOMMENDATIONS:

1. That the request of the Jackson-Calhoun, Washington-Holmes, and Gadsden-Liberty County Medical Societies to form the Panhandle Medical Society, Inc. be granted.

2. Your Board of Governors, after careful study and extensive deliberation, recommends to the House of Delegates that the dues for active members be increased from $50.00 to $75.00 for the following reasons:

a. As income and expenses are very close, any new projects or activities will require more money than presently available.

b. In the event of the disability of our legal counsel, Mr. Gray, our legal expenses will be increased by $10,000-$20,000 a year.

c. The Association should consider paying some travel expenses for council and committee members since council and committee meetings are becoming much more frequent.

d. AMA delegates have requested that expenses of their alternates to attend AMA meetings be paid.

e. The Association is hoping to take over the billing of dues for county medical societies.

f. Annual meetings of the legislature will vastly increase our legislative expenses.

g. The national legislative program needs to be expanded necessitating more funds for our key contact physicians.

h. Updating and keeping the Relative Value Studies current will require an expenditure of $15,000 to $25,000 per year.

i. New programs for postgraduate medical education will need funds.

j. There is a possibility that the FMA property will lose its tax exemption.

k. Increased cost of the Association for unanticipated lawsuits.

l. Implementation of a positive legislative program for professional liability insurance.

3. The Board of Governors recommends that the requirement for members of the Committee on Scientific Assemblies to preside over each session be waived this year due to the new format with twelve scientific sessions.

Supplemental Report

Your Board at its meeting on May 11, 1969 voted to reaffirm and enthusiastically support the candidacy of Edward R. Annis, M.D., for re-election as a member of the AMA Board of Trustees.

Subcommittee on Venomous Snakebite

Dr. Cullipher: "The Reference Committee considered the report of the Subcommittee on Venomous Snakebite and recommends that it be accepted as printed in the Handbook."

Motion carried.

Subcommittee Report

CARL E. ANDREWS, *Chairman*

The Venomous Snakebite Subcommittee has been trying to get new reporting forms available for the emergency rooms so that more accurate information in reporting can be accomplished. We are still working on the photographs of venomous snakes for various emergency rooms so that accurate identification of the snake, if possible, can be obtained.

Investment Plan Committee

Dr. Cullipher: "The Reference Committee considered the report of the Investment Plan Committee and recommends that it be accepted as printed in the Handbook."

Motion carried.

Committee Report

BURNS A. DOBBINS JR., *Chairman*

During the past year the Florida Medical Association Investment Plan Committee has held two informal meetings, one at the Conference of Presidents and Secretaries in Orlando and the other at the Diplomat Hotel during the annual session in May 1968.

With 19 agents throughout the state representing the plan, it has experienced its biggest growth during the past year, with a 43% increase in enrollment. As of December 31, 1968, there were 393 members participating in the plan, representing an increase of 119 during 1968. One hundred twenty-five physicians are using our program in their regular investment schedule, and 268 are using it as an investment facility to take advantage of Keogh provisions for self-employed retirement planning.

Your FMA Investment Plan plans to continue to offer a service to our FMA members. Although no "hard sell" campaign is envisioned, there will be a continuing educational effort on the part of your committee to acquaint FMA members with the facilities available to them.

Judicial Council

Dr. Cullipher: "The Reference Committee considered the report of the Judicial Council and recommends an amendment to Opinion 68-4 of the Judicial Council as follows:

"The Council reaffirms its policy that hospital-based physicians should be members of the medical staff and contracted for service by or through the medical staff of the hospital, and that as long as a physician provides satisfactory service under his contract with the institution, the institution has no right to regulate his professional activities outside the institution."

"The Reference Committee recommends that the report of the Judicial Council, including the reports of its committees, be approved with the above amendment."

Dr. Beychok, Sarasota: "The Sarasota delegation would like to offer a substitute amendment:

"I call your attention to the original Opinion 68-4. In the reference committee, there was considerable conversation about the word 'employed' in the second line. As a result, you will note in the report of the reference committee, the word 'contract' is used. It seems to us that this is confusing terminology and because of the great importance of the question of whether or not a hospital board hires or contracts for physicians' services, this should be clarified. It seems to us that the wording of the reference committee recommendation is inexact and could lead to misconception as to who is hiring whom and whether or not the medical staff can contract for a hospital-based physician.

"This is the amendment: The FMA reaffirms its policy that hospital-based physicians must be members of the medical staff, approved for hospital practice in their respective fields by the medical staff and that all professional activities performed in hospitals by such physicians are to be regulated solely by the medical staff. Further the FMA affirms that contracts entered into by hospital-based physicians and hospital boards shall be such that said physicians shall retain their status as private practitioners of medicine; recognizing that hospital governing boards satisfy their responsibility of providing in-hospital medical services by insuring the practicing presence of such qualified physicians, and that salary arrangements or employer-employee arrangements not only are not required to fulfill such Board responsibilities, but are, in fact, detrimental to the best interests of the public."

Amendment seconded.

Dr. Beychok: "There is a definite relation between this amendment and some of the problems Reference Committee III was faced with, and we wanted to make this very clear."

Dr. Reilly, Charlotte: "I can vouch from personal experience that this needs to be made just as explicit as Dr. Beychok presented it. I wholeheartedly support his amendment."

Dr. Robert E. Zellner, Past President: "This is a rather lengthy amendment and I agree with both the previous speakers, but I don't think we can digest it adequately, and it seems it would be best to refer both of these amendments back to the Judicial Council and I so move."

Motion was seconded.

Dr. Jerome Benson, Dade: "As a pathologist, I don't believe members in private practice are sensitive to this very excellent amendment offered by the Sarasota delegation. I believe there is an emergent situation in this state in many hospitals and the motion to refer will cause all kinds of problems for those involved in this struggle."

Motion to refer was defeated. The Speaker again read the Sarasota amendment.

Dr. Hubbell, Pinellas: "Basically I think this is a very good motion, however, there are one or two things in it which might be some problem, particularly for the small one-man hospital. If there is a one-man medical staff, who else regulates it? We have had some very bad things in our area and if it were not for some other regulatory agencies such as the county medical society, we would never have solved these problems."

Motion was carried to approve the amendment offered by the Sarasota County Medical Society delegation.

Motion was carried to approve the report of the Judicial Council as amended.

Supplemental Report

Dr. Cullipher: "The Reference Committee considered the Supplemental Report of the Judicial Council. On page 1 of this report, in the sixth paragraph, the reference to 'Chapter 11' of the FMA By-Laws should be corrected to read 'Chapter XII.'

"On page 2, at the end of the first paragraph, a statement should be added: 'Attention is called to Chapter I, Section 4, of the By-Laws of the Florida Medical Association, which provides in part that the component society shall be the basic unit for censuring, suspending or otherwise disciplining its members, and that suspension or termination of membership by component society action shall automatically place the member in the same status in the Florida Medical Association.'

"The reference committee recommends that the Supplemental Report of the Judicial Council be approved as amended."

Motion carried to approve the amendment.

Motion carried to approve the supplemental report as amended.

Council Report

JOHN J. CHELEDEN, *Chairman*

Council:

The Judicial Council met on July 7, 1968.

Medical Practice Act:

The Council considered the revision of the Medical Practice Act and five changes in the revision proposed since the meeting of the House of Delegates in May.

1. "Legal sanction for unlicensed physicians is retained pursuant to action of the House of Delegates of the FMA."

Recommendation:

1. That all physicians coming into Florida to render medical services be required to register with the State Board of Medical Examiners, whether or not they have a Florida license; that no physician shall render patient care unless he is registered with the State Board of Medical Examiners; and that it be the joint responsibility of the unlicensed physician and his employer (whether a state institution or other employer) to see that the unlicensed physician is registered.

2. "Existing §458.05 (2) (b), referring to qualifications of applicants, is enlarged and broadened in an attempt to prevent undesirable applicants from becoming licensed in this State."

Recommendation:

2. That the Board be authorized to investigate any applicant who has committed an act or offense outside the State of Florida which if committed in the State of Florida would constitute grounds for disciplining a licensed physician.

3. "Physicians who have terminated their practice for five (5) years or more do not automatically lose licensure as was proposed by former §458.11 (2) (3). Instead such physicians may lose licensure by Board action as provided for by proposed §458.12 (1) (bb)."

Recommendation:

3. That the proposed §458.12 (1) (bb) be utilized for revocation of licenses.

4. " 'Unprofessional conduct' as a ground is defined by proposed §458.12 (1) (z)."

Recommendation:

4. That the following explanation be used for the term "unprofessional conduct": "As used in this subsection unprofessional conduct shall include any departure from or the failure to conform to the minimal standards of acceptable medical practice prevailing in a physician's community whether or not the same is injurious to a patient or harmful to the public. Unprofessional conduct shall also include the commission by a physician of any act contrary to honesty, justice or good morals whether the act is committed in the course of his relations as a physician or otherwise and whether committed within or without the State of Florida."

5. "Existing §458.17 is re-enacted with a savings clause which will permit the Board to continue to prosecute for violations of the existing law even after the new law takes effect. Without such a savings clause errant physicians would in effect be immunized against Board prosecution."

Recommendation:

5. That §458.17, referring to transitory provisions, be re-enacted with a savings clause.

Paramedical Practice Act:

The Council considered two legislative bills which propose a superboard for all occupational licenses. This board would have a director appointed by the Governor and serving at his pleasure. Under him would be separate boards consisting of five persons each, three of whom would be professional people and the other two laymen.

Recommendation:

6. That the Florida Medical Association join with other professional groups in Florida to continue opposing the superboard legislation and to insure that the integrity of the Board of Medical Examiners is retained. (Approved R.C. IV)

The Council considered the proposal to include paramedical personnel under the jurisdiction of the State Board of Medical Examiners. The Council recommended to the Board that a special committee be appointed to review the matter of paramedical personnel, the training of doctor's assistants, and proper licensure in Florida.

Surgical Assistants' Compensation:

The Council received from a hospital, which does not have resident physicians, a proposal to establish a Medical Staff Assistants' Fund to be supervised by the Executive Committee of the Medical Staff. This fund would reimburse the hospital for the cost of securing M.D. surgical assistants. Only physicians who have not obtained their license in Florida (but who are registered) would be paid from this fund. Licensed physicians secured by the hospital to serve as surgical assistants would bill for their own services. The attending physician would pay to the Surgical Assistants' Fund a pre-determined amount for the services of the unlicensed surgical assistant. The Council recommended that this proposal be approved.

Corporate Practice of Medicine:

The Council reviewed the progress that has been made in having hospital-based physicians bill separately for their professional fees.

The Council recommended that a conference be held on Corporate Practice of Medicine and Emergency Room Coverage, and that this conference include the Judicial Council, the Committee on Membership and Discipline and the Council on Specialty Medicine.

The Council requested that the Board of Governors instruct the AMA delegates to propose an appropriate resolution to ask the AMA representatives on the Joint Commission on Accreditation of Hospitals (JCAH) to investigate the possibility of requiring that all members of the medical staff of a hospital comply with the principles of medical ethics for accreditation of a hospital.

A joint meeting of the Judicial Council and the Committee on Membership and Discipline will be held April 12 and 13 to cover the subject of corporate practice as it relates to medical schools academic enrichment funds, internship and residency programs, emergency room contracts, and AMA-FMA policy regarding physicians serving on hospital boards. Recommendations will be presented in a supplemental report of the Council.

Emergency Rooms:

Two emergency departments, namely, the Halifax District Hospital, Daytona Beach, and the Lakeland General Hospital, Lakeland, have been approved as satisfying the ethical requirements of the Judicial Council of the FMA in the fact (a) there is no guarantee of salary, (b) professional fees are separated from hospital charges, (c) professional fees are placed in a separate fund and under the management of the medical staff, and (d) there is no maximum or ceiling on the income for physicians's services.

The Council considered numerous other items received from individual members, county societies, specialty groups and other agencies which were disposed of in a satisfactory manner.

The following opinions were rendered in response to inquiries from members during the past year:

68-1: Compliance with the Civil Rights Act of 1964 has nothing to do with medical ethics.

68-2: It is improper for the Journal of the FMA to accept any advertisement which uses the words "guaranteed referral income."

68-3: It is ethical and desirable for a doctor of medicine to use M.D. after his name in a political campaign.

68-4: The FMA reaffirms its policy that hospital-based physicians must be members of the medical staff, approved for hospital practice in their respective fields by the medical staff and that all professional activities performed in hospitals by such physicians are to be regulated solely by the medical staff. Further the FMA affirms that contracts entered into by hospital-based physicians and hospital boards shall be such that said physicians shall retain their status as private practitioners of medicine; recognizing that hospital governing boards satisfy their responsibility of providing in-hospital medical services by insuring the practicing presence of such qualified physicians, and that salary arrangements or employer-employee arrangements not only are not required to fulfill such Board responsibilities, but are, in fact, detrimental to the best interests of the public.

The chairman of the Judicial Council is most grateful for the endeavors and cooperation of the chairman of the various committees serving under the Judicial Council: Warren W. Quillian, William M. Straight, J. Champneys Taylor and James T. Cook.

Supplemental Report

Your Judicial Council sponsored a joint meeting with the Committee on Membership and Discipline, representatives of Specialty Groups and the Board of Medical Examiners, regarding the Corporate Practice of Medicine on April 12, 1969 and had a formal meeting of the Judicial Council on April 27, 1969.

Your Judicial Council upon approval, upheld the action of a county medical society in the expulsion of a member and upheld the action of another county medical society for refusing to vote a physician into membership.

1. Charlotte Hospital Association, Medical Center Hospital, Punta Gorda

Your Judicial Council reviewed a resolution from the Charlotte County Medical Society regarding the dismissal of a staff member, Carl N. Reilly, M.D., from the medical staff of the Medical Center Hospital, Punta Gorda, with no reason being given and no consultation with the medical staff. This was investigated and the following action was taken:

To advise the County Medical Society of section 6 of the Principles of Medical Ethics of the American Medical Association, which reads as follows:

> "A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care."

and chapter XII of the By-Laws of the Florida Medical Association which makes it binding upon our members, which reads as follows:

> "The principles as set forth in the Principles of Medical Ethics of the American Medical Association shall be the Principles of Medical Ethics for the Florida Medical Association and shall govern the conduct of the members of the Association in their relations to each other and to the public. Opinions of the Judicial Council of the American Medical Association shall be used as a guide in the interpretation of these principles."

that from the evidence presented to the Judicial Council, the circumstances under which the patients are being treated in this hospital are in violation of the Principles of Medical Ethics; suggesting that the County Medical Society investigate, and if there is a violation, appropriate action be taken, and that this be called to the attention of every component county medical society.

Attention is called to Chapter I, Section 4 of the By-Laws of the Florida Medical Association, which provides in part that the component society shall be the basic unit for censuring, suspending or otherwise disciplining its members, and that suspension or termination of membership by component society action shall automatically place the member in the same status in the Florida Medical Association.

To request the Board of Medical Examiners and the Florida State Board of Health to investigate and report as soon as possible.

To request the Board of Trustees of the American Medical Association to ask its commissioners on the Joint Commission for Accreditation of Hospitals to investigate the situation.

2. Resolution on Life and Death

Your Judicial Council considered a resolution on life and death presented by James R. Jude, M.D. of Dade County, referred by the Board of Governors.

Recommendation:

That the AMA's statement regarding life and death organ transplants is adequate at this time as follows:

The Judicial Council of the AMA offers the following statement for guidance of physicians as they seek to maintain the highest level of ethical conduct in their practices.

1. In all professional relationships between a physician and his patient, the physician's primary concern must be the health of his patient. He owes the patient his primary allegiance. This concern and allegiance must be preseved in all medical procedures, including those which involve the transplantation of an organ from one person to another where both donor and recipient are patients. Care must, therefore, be taken to protect the rights of both the donor and the recipient, and no physician may assume a responsibility in organ transplantation unless the rights of both donor and recipient are equally protected.

2. A prospective organ transplant offers no justification for relaxation of the usual standards of medical care. The physician should provide his patient, who may be a prospective organ donor, with that care usually given others being treated for a similar injury or disease.
3. When a vital, single organ is to be transplanted, the death of the donor shall have been determined by at least one physician other than the recipient's physician. Death shall be determined by the clinical judgment of the physician. In making this determination, the ethical physician will use all available, currently accepted scientific tests.
4. Full discussion of the proposed procedure with the donor and the recipient or their responsible relatives or representatives is mandatory. The physician should be objective in discussing the procedure, in disclosing known risks and possible hazards, and in advising of the alternative procedures available. The physicians should not encourage expectations beyond those which the circumstances justify. The physician's interest in advancing scientific knowledge must always be secondary to his primary concern for the patient.
5. Transplant procedures of body organs should be undertaken (a) only by physicians who possess special medical knowledge and technical competence developed through special training, study, and laboratory experience and practice, and (b) in medical institutions with facilities adequate to protect the health and well-being of the parties to the procedure.
6. Transplantation of body organs should be undertaken only after careful evaluation of the availability and effectiveness of other possible therapy.
7. Medicine recognizes that organ transplants are newsworthy and that the public is entitled to be correctly informed about them. Normally, a scientific report of the procedures should first be made to the medical profession for review and evaluation. When dramatic aspects of medical advances prevent adherence to accepted procedures, objective, factual, and discreet public reports to the communications media may be made by a properly authorized physician, but should be followed as soon as possible by full scientific reports to the profession.

In organ transplantation procedures, the right of privacy of the parties to the procedures must be respected. Without their authorization to disclose their identity the physician is limited to an impersonal discussion of the procedure.

Reporting of medical and surgical procedures should always be objective and factual. Such reporting will also preserve and enhance the stature of the medical profession and its service to mankind.



President-Elect Dr. Henry J. Babers Jr., Mrs. Babers, Mrs. Cleveland and President Jack Q. Cleveland at president's reception.

3. Incorporation of Medical Staffs

Your Judicial Council reviewed in detail the various areas of Florida and the resulting problems involved concerning the domination of the professional staff by lay boards of hospitals.

Recommendation:

To improve medical staff relations with governing boards of hospitals, the Florida Medical Association provide assistance to County Medical Societies for those physicians on medical staffs who wish to legally incorporate and deal as a corporate body with the hospital.

(This is not to be confused with "professional service corporations" or with the "corporate practice of medicine.")

4. Corporate Practice of Medicine

Your Judicial Council reviewed a report concerning a number of hospitals in Florida engaged in the corporate practice of medicine and will provide a list to county medical societies, asking them to investigate and report to the Florida Medical Association; the State Board of Medical Examiners has agreed to assist in this effort.

Recommendation:

That the House of Delegates restate and emphasize that the corporate practice of medicine is illegal and unethical in Florida (previous policies).

Excerpt from Proceedings of May 1963:

"We recommend to the Board of Governors that as radiologists, anesthesiologists, and pathologists are all doctors of medicine and are bound by the *Principles of Medical Ethics* the same as any other doctor of medicine, or group of physicians, if they have a contract with any hospital whereby their services are purveyed by the hospital, then the hospital is engaged in the corporate practice of medicine, which is illegal; the doctors are allowing themselves to be exploited and are violating the *Principles of Medical Ethics* of the American Medical Association and procedures must be taken against them."

Excerpt from Proceedings of April 1965:

"That any contract, written or oral, which permits purveyal of the physician's services for profit is unethical; that in the private practice of medicine a contract is only acceptable on a fee-for-service basis; we would also like to reaffirm the ethic that a physician should render the bill to the patient (himself) for his services and his services alone; and that this policy should be implemented by the local county medical society in conjunction with the specialty society involved. If for any reason this is not possible, any problems involved should be heard and adjudicated by the Judicial Council of the Florida Medical Association."

5. Committee on Membership and Discipline

Your Judicial Council moved that the House of Delegates be requested to expand the Committee on Membership and Discipline to four members in each Congressional District.

Recommendation:

That the Board of Governors be authorized to make interim appointments of members to the Committee on Membership and Discipline.

Committees:

Committee on Archives—The Archives Committee of the Florida Medical Association has transacted its business during the past year through a newsletter which was sent to all members of the committee in July 1968, and through a telephone conference on March 8, 1969.

Although the following event occurred just prior to the 1968 Annual Meeting of the Florida Medical Association, it was not included in our report at that time. The event referred to is the dedication of a historical marker at the home of Dr. Joseph Y. Porter in Key West on May 8, 1968. This 43 inch square, cast aluminum marker details the great contribution of Dr. Porter to the eradication of yellow fever and other epidemic diseases in Florida. Through the energetic assistance of the members of the Monroe County Medical Society, a well attended ceremony was held at the Porter mansion, 429 Caroline Street, with addresses by the Mayor of Key West, the President of the Florida Medical Association, the President of the Florida State Board of Health, the State Health Officer and Dr. Jose T. Sanchez Jr., the President of the Monroe County Medical Society. Negotiations are in progress to install a similar marker at the office of Dr. Abel S. Baldwin in Jacksonville, the site of the founding of the Florida Medical Association.

At the first meeting of the House of Delegates, May 9, 1968, Dr. Rowland Wood, a member of this committee, conducted a memorial service for our departed members. Also, at this time, we recognized those members who had joined the FMA in the years 1936 and 1937. In further recognition of the members of this period, we attached streamers to their badges and held a reception for them at 1:00 o'clock on Friday, May 10. Possibly because of severe competition from a luncheon scheduled at this time, the reception was poorly attended.

Our project to acquire an Archives Data Form on each member of the Association has been quite successful for members joining since the Association passed a rule that the applicant would not be accepted until such a form was completed. However, there are still a number of members who came into the Association before this rule was passed who have not completed these forms. We believe that this is a relatively small number, however.

This committee has a subcommittee devoted to the project of the History of Medicine Museum in St. Augustine. This project, now approximately three years old, is under the chairmanship of Dr. James J. DeVito. Since the last annual meeting of the FMA, the Board of Governors has granted $1,000 to this project. In addition, several county medical societies, several individual physicians, and certain other people have donated funds to this project. In all, the total amount collected comes to approximately $1,900. In your packet you will find a list of the donors and their contributions. With these funds, certain improvements have been made in the restored Spanish hospital in St. Augustine, and steps have been taken to purchase and clothe mannequins with which to people the hospital. The subcommittee will have an exhibit at the coming annual meeting of the FMA, and it is hoped that this will stimulate more members to donate to this project.

The project to write a History of Medicine in Florida is progressing slowly. The grant to employ a Spanish paleographer has expired and there is some question whether it will be renewed. However, the greater part of the manuscript translations has been done and we hope to finish that portion of the project. Portions of this material have already been published in the August 1968 issue of the Journal of the Florida Medical Association. The chairman is working steadily on the medical history during the English and United States periods, using as his sources microfilmed newspapers and similar primary sources.

In August 1968, this committee sponsored a historical issue of the Journal of the Florida Medical Association. This was well received and we are well on our way to a similar issue in August of this year.

Dr. Cullipher: "The Reference Committee considered the supplemental report of the Committee on Archives and recommends its approval with the addition of the name of Dr. Buell Bindshedler, of Broward County, who died on January 1, 1969."

One more name was added, that of Dr. John T. McCormick of Duval.

Motion carried.

Supplemental Report

The Association has lost a number of its fine members during the past year and a list of these names is given below.

April 1968
- McClary, George R.—Dade
- Owen, R. Wynn S.—Pinellas
- Towbin, Samuel—Dade
- Unger, Jonas J.—Dade
- White, D. Ward—Dade

May 1968
- Campbell, Meredith F.—Broward
- Jackson, Kenneth W.—Polk
- Oberlander, Irving A.—Dade
- Robinson, James L. Jr.—Collier

June 1968
- Hart, Dean W.—Pinellas
- Magill, John C.—Pinellas
- Moore, Dean C.—Monroe
- Tocci, Frank P.—Broward

July 1968
- Brame, Dorothy D.—Orange
- Gilmer, Eugene S.—Hillsborough
- Simon, Herbert J.—Broward

August 1968
- Bicknell, George F.—Alachua
- Campbell, William R.—Dade
- Cason, James F.—Polk
- Hartman, David—Volusia
- Raszus, George C.—Dade
- Skilling, Francis C.—Dade

September 1968
- Blackmon, William P.—Brevard
- Dunaway, Carl E.—Dade
- Kelley, William H.—Volusia
- Smith, B. Arthur—Volusia

October 1968
- Ayers, Sanford E.—Orange

November 1968
- Turton, Murrell H.—Broward

December 1968
- Ellis, Wm. H.—Dade
- Taylor, Thomas W.—Sarasota

January 1969
- Bindshedler, Buell—Broward
- Cobb, Alva T. Jr.—Alachua
- Sapp, James W.—Gadsden-Liberty

February 1969
- Lauth, Edward J. Jr.—Dade

April 1969
- McCormick, John T.—Duval
- Stewart, Paul Bryant—Pinellas

Committee on Medical Licensure—In 1968 the Board of Medical Examiners examined for licensure 736 applicants; 699 received licenses, and 37 failed. The Division of Physical Therapy registered 81 physical therapists.

Investigation of complaints filed with the Board resulted in hearings and the following action:

1 license suspended for two years with suspension not enforced and physician placed on probation (narcotic violations).

1 hearing postponed (narcotic violations).

2 voluntary appearances to discuss complaints regarding professional conduct.

1 charge dismissed (immoral and unprofessional conduct).

25 probation hearings with 8 licenses reinstated.

1 license reinstated at termination of two year enforced suspension.

9 hearings on irregularities in applications.

Council on Special Activities

Dr. Cullipher: "The Reference Committee considered the report of the Council on Special Activities and recommends to the Board of Governors that it increase, in the amount it deems appropriate, the financial assistance now given to the Woman's Auxiliary to the Florida Medical Association. The Reference Committee recommends approval of this recommendation and the report of the Council on Special Activities as printed in the Handbook.

Council Report

WILLIAM C. ROBERTS, *Chairman*

Council:

This Council had no reason to meet this current year. The committees under this Council have done their jobs in a superb manner. They are to be congratulated and commended for their efforts and results. The most active of the special activities were manifested by the Woman's Auxiliary to the AMA. The Chairman of the Advisory to the Woman's Auxiliary, Dr. Linus W. Hewit, attended many meetings of the organization as well as several of the meetings of the Auxiliary to the AMA. Dr. Hewit deserves special commendation for his efforts. He recommends that more financial support be given the Auxiliary to implement its program, noting that its president and president-elect have inadequate funds allotted them through the organization's financial structure. The fact that this organization does such a fine job of public relations, along with other tasks assigned, indicates that they should get more financial support. Dr. Hewit also suggests the chairman of the Advisory Committee be the husband of the President of the Auxiliary.

Dr. Reuben B. Chrisman, Chairman of the Delegates to the AMA reports that all the delegates and two alternates attended the June and December meetings of the AMA as well as our President and President-Elect, our Executive Director and Secretary-Treasurer. He also states that Dr. Edward R. Annis was in attendance. This representation is perhaps the best official offering the FMA has ever had. The resolutions introduced individually and by direction from the FMA all passed or were referred to the Board of Trustees. Thanks to all the representation. Dr. Warren Quillian attended both sessions of AMA along with our other representatives. He was representing the Section on Pediatrics.

The FMA resolutions which were referred to the AMA House of Delegates and additional resolutions introduced by the Florida delegation and their disposition was as follows:

FMA Res.	AMA Res.	Subject	Disposition
68-22	53	Violence & Lawlessness	Referred to Board of Trustees
68-23	54	Wilbur J. Cohen, Secy. of Dept. of HEW	Not adopted
68-12	55	Medical Membership Classifications	Referred to Board of Trustees
68-14	56	Medical Meetings	Substitute Approved
	57	Clarification of Health Cost to American People	Referred to Board of Trustees
	58	Medical Product Advertising in Today's Health	Referred to Board of Trustees
	59	A United States Dept. of Health	Substitute Approved
	31	Accreditation of Hospitals	Substitute Approved

The Chairman of the Board of Past Presidents, Dr. Francis H. Langley, was unable to attend the Past Presidents' breakfast last year, but has this year done his job admirably and with dignity and enthusiasm in spite of his illness. He apparently is doing well now. Dr. George Palmer was elected to the Judicial Council from this Board. No tasks were assigned to this board this year.

The recommendation of this Council is made by Dr. Hewit. We ditto his recommendation and hope the FMA will try its best to implement same.

President's Annual Address

Dr. Cullipher: "The Reference Committee considered the annual address of our President, Dr. Jack Cleveland, and wishes to commend him for the timeliness and appropriateness of his remarks in a time of rapid change and new developments for medicine. The Reference Committee recommends that this address be approved as presented to this House of Delegates."

Motion carried.

(The complete text of the President's address starts on page 483).

Resolution 69-5

Medical Licensure (Not Adopted)

Dr. Cullipher: "The Reference Committee considered Resolution 69-5 and recommends that it not be adopted."

Motion carried.

Resolutions 69-7 and 69-25

Dr. Cullipher: "Resolution No. 69-7 and Resolution No. 69-25 both deal with Osteopathy and were considered together. The Reference Com-

(Continued on page 523)



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It is the time when motivation is highest—when a new mother needs expert advice for the future, so she can space her children and limit her family.

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Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.



References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

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mittee offers in their stead Substitute Resolution No. 69-7, which we recommend for adoption."

Dr. Cullipher read the reference committee's suggested substitute resolution.

Dr. William J. Dean, Pinellas, moved that this controversial subject be discussed in executive session and that it be deferred until the last order of business for the day. Motion seconded.

Dr. William M. Straight, Dade: "I want to speak against postponing this because the delegates may leave and this is probably the most important issue to come before us today. I move we vote down this motion and that we go into executive session right now while the majority of the delegates are here."

Dr. Joseph F. Newhall Jr., Manatee: "Such an important question as this should be discussed before we are asked to select our leaders for next year. This might weigh heavily on our selection; therefore, I ask that we take this up in the usual order."

Dr. William C. Roberts, Past President: "It is time we met this head on; discuss it now; let's don't pussyfoot."

Motion to postpone was defeated.

Dr. Dean: "I move we go into executive session for the discussion of this particular subject." Motion was seconded.

Dr. Carl N. Reilly, Charlotte: "I am sorry to be so insistent, but I have recently had considerable experience with the press. Any time you make public business private, you raise suspicion. What is to be said here this morning concerns the public."

Dr. Walter W. Sackett, Dade: "There is a terrific movement for government 'in the sunshine' and I would like to call for it here."

Motion to go into executive session was defeated.

Dr. W. M. C. Wilhoit, Escambia: "I would like to offer a substitute resolution for 69-7:

"Whereas, under Florida statutes osteopaths have the same rights and privileges as doctors of medicine; Therefore, be it

"RESOLVED, That the policy of the Florida Medical Association be that the professional association with osteopaths be determined on an individual basis."

Seconded.

Dr. George S. Palmer, Past President: "I want to point out a few legal facts of life for your consideration in voting on this substitute resolution. By law, the Florida Statutes set up a mechanism whereby the practice of medicine is created and regulated in Florida. By this act the Board is appointed to determine the qualifications and educational experience, examines, issues licenses, regulates and disciplines doctors of medicine. Another statute does exactly the same thing for doctors of osteopathy. Thus, by law a D.O. is entitled to practice medicine and surgery in Florida once he is licensed under the Medical Practice Act. They are licensed members of the healing art the same as we are. Upon firm legal advice by legal counsel of our Association any attempt to prevent association of a group such as M.D.'s with any other group which furnishes similar services would be doomed to failure because of the provisions of the Sherman Anti-Trust Act; namely, restraint of trade or removal of means of livelihood from a group giving similar services. There are already established legal precedents and court decisions for this statement, therefore, if the Florida Medical Association is party to or co-defendant with a hospital staff or anyone in any such case or suit, the result would be a disastrous loss of financial resources for legal services and for the inevitable appeal and counter-suit. This would bankrupt our Association. Under these circumstances, I cannot think of one good or valid reason why we should allow this to happen to the heart and soul of organized medicine in Florida. We cannot win such a case. I would ask you to support the resolution of the Board of Governors."

Dr. Irving E. Hall Jr., Vice President: "I am a member of the Board of Governors and respect every man on it. I was the lone dissenting voice on the Board of Governors. We have fought this in Manatee County for 15 years. We have been all the way to the Supreme Court and we won. This stands as a precedent. We think it is wrong to change our principles in the face of any force. This substitute motion would change our principles. A legal opinion given to us this morning, says this will kill Dade City. They don't have a chance if we pass this substitute motion.

"The Florida Medical Association is a medical-political organization. We are not here just for scientific reasons; we are here to get things done for the good of medicine and to keep our freedom. If we change our position then each individual physician must make his decision and we will no longer be joined together in a common effort. I want to warn you about fighting a battle while looking over our shoulder and running the other way."

Dr. Meyer, of Manatee, read the former statement of the Board of Governors on osteopathy, which was made in 1961.

Dr. Steward, Orange: "I would like to say just a word in rebuttal to Dr. Hall's presentation.

We are not just a political organization. We have over 200 active programs, mostly dealing with scientific matters."

He then read a statement by FMA legal counsel, Mr. Harry T. Gray.

TO: House of Delegates
FROM: Marks, Gray, Yates, Conroy and Gibbs FMA Legal Counsel
REFERENCE: Page 38, paragraph 7 (in the Handbook, referring to the Lawsuit brought against the Florida Medical Association by two osteopaths.

The recommendation of the Board of Governors regarding osteopathy was deemed desirable in our opinion from a legal standpoint, based upon previous suits in the federal courts, involving State and Federal laws.

A preliminary hearing has been held by the Federal Judge in Tampa and he has the case under advisement. A decree is expected in the immediate future.

Due to the fact that triple damages are claimed under the Anti-Trust Act against the FMA, the problems presented in this suit are a serious hazard to the future of the Florida Medical Association, whether or not we are successful in the pending suit.

Delbridge Gibbs
and
Harry T. Gray

Dr. Forlaw, Palm Beach: "I would speak against adopting the substitute resolution and for the resolution presented by the reference committee. It was our feeling that the individual doctor had no criteria for judging the qualifications of osteopaths."

Dr. Francis T. Holland, AMA Delegate: "I would like to speak for the Board of Governors' resolution. I have been a member of many AMA committees dealing with this problem. You will recall that several years ago, Dr. Kline investigated the osteopathic schools and found they were teaching good basic medicine."

Dr. William H. Hubbard, Pasco: "I am from New Port Richey, where we have six M.D.'s and six osteopaths. I would like us to strive for higher standards. The fact that there are two Boards of Examiners points us out as being different. We are not the same, we are two different professions."

Dr. John F. Mason Jr., Bay: "I would like to speak for the Board of Governors' amendment from the standpoint of the patient. We, in West Florida, have repeated requests to consult with the osteopaths, and to supervise and treat their patients. In many instances, the osteopaths are the only physicians available to the patient. As the M.D.'s desert family practice, the osteopaths have been the only ones doing it. We are prohibited from associating with them, and thus cannot help train them to practice better medicine. I would vote for the Board of Governors' recommendation."

Dr. Robert E. Zellner, Past President: "I wish we could do what California did and get rid of osteopaths. When I was president, I wrote to the deans of the two medical schools, trying to get them to suggest a means of educating osteopaths to be M.D.'s but they said they were so weak in the basic sciences, the only thing they could do would be to take them as freshmen in medical school and have them go the whole four years. None of them want to get an M.D. degree; they just want M.D. prices and privileges."

Dr. Richard S. Hodes, Tampa: "There is a bill before the legislature in Tallahassee which is designed to specifically spell out under what circumstances a hospital may or may not accept the credentials of D.O.'s, M.D.'s and dentists for hospital privileges. If this substitute resolution were passed, it would seriously weaken our position in getting this bill passed. It took a lot of subcommittee work to develop this legislation. I recommend that the substitute motion be defeated."

Dr. William C. Roberts: "I have to differ from my colleague from Bay. I have been and always will be against osteopaths."

Dr. Samuel M. Day, Past President: "I am antagonistic to the motion. Bob Zellner and I probably fought this more than any of the people here. If you let each man decide, you pull the rug out from under some people. In looking over their school catalogs, they have about one-third of the curriculum on osteopathy and certainly this does not justify saying their schools are comparable to medical schools. We never approved Class "B" medical schools. If we adopt the reference committee's resolution, they can upgrade their standards. I think we should take them in eventually and this gives a method of doing it. If we change our principles on which we have stood for so long, it will open the door for all others including the chiropractors and we will have to turn 'chicken' again."

Dr. Thad Moseley, Duval, called for the question.

The substitute motion failed.

Dr. Franklin J. Evans, Dade: "I have no objection to the Reference Committee recommendation except for certain language used in it. I would like to see such words as 'cultism' stricken. I don't think name-calling does any good.

"I would move to strike the third 'Whereas.' "

Motion seconded.

Dr. Day: "It seems to me that 'cultism' is one of the basic facts on which we will not approve the osteopath."

Dr. Hall: "We are talking of basic principles —the fact is that they are a cult. They do not have a scientific basis. I want to help their patients, but I don't want to recognize them."

Dr. Evans: "The osteopaths are accepted by the Veterans Administration, the Defense Department and Medicare. We seem to be flying in the face of what is recognized by others. This is not the same as chiropractors because they are considered cultists even by Congress. I do not think name-calling should be a part of our resolution."

Someone moved for the question and the motion carried.

Motion carried to delete the third 'Whereas' of the Reference Committee resolution.

Dr. Louis Perez, Seminole: "I move that the first 'Resolved' be put in place of the second 'Resolved.' Then add to the first 'Resolved' the words 'and be it further'; add to the second 'Resolved' the words 'until above conditions have been fulfilled.' "

Motion carried to make these two amendments.

Motion carried in favor of the substitute resolution as proposed by the Reference Committee.

Substitute Resolution 69-7

Osteopathy

Whereas, The members of the Florida Medical Association as a group of physicians and surgeons of medicine have as their aim the perpetuation and continuing improvement of the best in medical care for the people of Florida; and

Whereas, The Principles of Medical Ethics of the AMA and the FMA are clear and distinct in their meaning concerning the association or professional relationships between its members and those members of cults of medicine; and

Whereas, the 1961 resolution of the FMA concerning the osteopaths of Florida was quite explicit in prohibiting any association of FMA members and osteopaths; Therefore, be it

RESOLVED, That the Florida Medical Association urges the Florida medical schools, the Florida State Board of Medical Examiners, the American Medical Association and the Association of American Medical Colleges to explore the possibility of developing reasonable curricula on the postgraduate level for awarding an M.D. degree to qualified osteopaths, enabling them to meet the standards required for appointment to staffs of accredited hospitals, and for acceptance for both association with and membership in the county and state medical associations and the AMA; and be it further

RESOLVED, That the Florida Medical Association go on record as opposing any recognition of, or integration with, the osteopathic association until above conditions have been fulfilled.

Resolution 69-26

Dr. Cullipher: "This resolution on Hospital Staff Privileges was reviewed in detail and the committee recommends that this be amended by deleting all of the 'Resolveds' and inserting in their place the following:

"RESOLVED, That it be adopted as the official position of the Florida Medical Association that any dismissal of a physician from a hospital staff without due cause and due process does constitute an arbitrary and capricious action by the administration and the governing body of said hospital; and be it further

"RESOLVED, That this official position of the Florida Medical Association be made known by official communication to appropriate individuals, organizations or institutions by the Board of Governors of the Florida Medical Association.

"Mr. Speaker, the Reference Committee recommends that Resolution No. 69-26 be approved as amended."

Dr. Reilly, Charlotte: "I would like the right to support both amendments and to compliment the committee for straightening out a difficult problem for us."

Motion carried to approve these amendments.

Motion carried to approve the resolution as amended.

Hospital Staff Privileges
Charlotte County Medical Society

Whereas, Dr. Carl N. Reilly, a member of the Charlotte County Medical Society, the Florida Medical Association and the American Medical Association was on Thursday, March 20, 1969 notified by the President of the Board of Directors of the Charlotte Hospital Association, Medical Center Hospital, Punta Gorda, Florida, that his 'privileges as a member of the Medical Staff of Medical Center Hospital were revoked, terminated and withdrawn by the Board of Directors of Charlotte Hospital Association, Inc., effective March 19, 1969', and

Whereas, No reason was then stated or has been stated, and

Whereas, the President of the Board of Directors of the Charlotte Hospital Association, Inc. has stated that no reason will be given now or in the future, and

Whereas, This unwarranted, unexplained and unjustified action has caused irreparable damage to the reputation, medical practice and peace of mind of Dr. Reilly, and

Whereas, This action has resulted in the denial of the only radiological diagnostic service in the community available to patients of the Medical Center Hospital, and

Whereas, This situation has now existed for over two weeks, and

Whereas, Continuation of this situation will so damage the professional status of Dr. Carl N. Reilly that he will be unable to obtain Staff status to render radiological diagnostic service, for which he is duly certified by the American Board of Radiology, in any hospital in the United States, and

Whereas, This appears to be but one example of numerous unexplained and apparently unwarranted arbitrary actions upon the part of several hospital Boards of Directors in the State of Florida; now, therefore be it

RESOLVED, That it be adopted as the official position of the Florida Medical Association that any dismissal of a physician from a hospital staff without due cause and due process does constitute an arbitrary and capricious action by the administration and the governing body of said hospital; and be it further

RESOLVED, That this official position of the Florida Medical Association be made known by official communication to appropriate individuals, organizations or institutions by the Board of Governors of the Florida Medical Association.

Resolution 69-33

Dr. Cullipher: "The committee considered Resolution 69-33 on Principles of Medical Ethics and the Crisis at Medical Center Hospital, Punta Gorda, Florida, and offers the following substitute resolution:

"Whereas, We have endorsed the report of the Judicial Council of FMA dated May 1, 1969, concerning Charlotte Hospital Association, Medical Center Hospital, Punta Gorda; and

Whereas, We note that this report states 'that from the evidence presented to the Judicial Council, the circumstances under which the patients are being treated in this hospital are in violation of the Principles of Medical Ethics of the American Medical Association,' and

Whereas, Section 4 of Chapter 1 of the Charter and By-Laws of the Florida Medical Association outlines the procedure for disciplinary action; Therefore, be it

RESOLVED, That the Charlotte County Medical Society be urged to act promptly in accordance with the Principles of Medical Ethics and the Florida Medical Association By-Laws, as directed by the Judicial Council. With these procedures completed, the Judicial Council is urged to take appropriate action promptly in this matter."

"Mr. Speaker, the reference committee recommends approval of the Substitute Resolution No. 69-33."

Dr. Reilly: "I rise to endorse the substitute resolution. I speak for the Charlotte County Medical Society and for Dr. Wayne O'Connell and would like to express our thanks to the Florida Medical Association, its officers, and particularly the Judicial Council for their interest and hard work. You have given us the correct direction that we sought from you and we feel the Society will now proceed to act promptly under that direction."

Motion carried to approve the substitute resolution.

Dr. Cullipher: "The Chairman wishes to thank the members of his reference committee who were most helpful and diligent in their deliberations and the members of the Association who appeared before our committee to express their opinions on the items under consideration. We would also like to thank our most efficient secretary, Mrs. Wanda Bain.

"Mr. Speaker, this concludes the report of Reference Committee III."

The President, Dr. Cleveland, took the Chair and asked Dr. West Bitzer to escort Dr. Eugene G. Peek Jr. to the rostrum.

Dr. Cleveland read the nomination and presented to Dr. Peek the Association's highest honor, the Certificate of Merit.

Dr. Peek: "I have been looking around trying to find out who Jack is talking about. It is difficult to find words to express my feelings. I thank my county society for having the confidence to submit my name and the Board of Governors for selecting me and to the House of Delegates for allowing me to receive this award.

"I regret that circumstances prevented the presence of my mother and father. I would, however, like to present to you my family—my right hand, my wife, Buggie, and then I would like to introduce the four things that make life worth living—my sons—Gene, Tom, David and Albert. No man could ask for more. Thank you."



President Cleveland presents the Certificate of Merit to Dr. Eugene G. Peek Jr.

Certificate of Merit

WHEREAS, Eugene Goodbred Peek Jr., M.D., of Ocala, a respected member of the Florida Medical Association, has made outstanding contributions to the Association, to the medical profession, to the public, and to his country, and merits special recognition for his achievements, and

WHEREAS, This distinguished physician was born in Ocala, Florida, on March 19, 1917; attended McCallie School in Chattanooga, Tennessee; received a B.S. and M.S. degree from the University of Richmond, and the degree of Doctor of Medicine from the Medical College of Virginia in 1944; completed his internship at the Medical College of Virginia Hospital, and a year of surgical residency at St. Elizabeth's Hospital, Richmond, Virginia; and

WHEREAS, This young physician practiced medicine for several months in Ocala, Florida, prior to entering the United States Army in July of 1946, where he served for two years as a medical officer, and was discharged as a Captain in July of 1948; and

WHEREAS, This honorable physician resumed the private practice of medicine in Ocala in 1948, where for over two decades he has continued his distinguished general practice; and

WHEREAS, This dedicated physician has been active in organized medicine, and has held the following positions: District and State Councilor of the Florida Medical Association; President of the Marion County Society; Board of Governors of the Florida Medical Association;

Delegate to the Florida Medical Association; Alternate Delegate to the American Medical Association; Vice-Speaker, House of Delegates, Florida Medical Association; Speaker, House of Delegates, Florida Medical Association; President, Florida State Board of Health; Board of Directors, Florida Academy of General Practice; Chairman, Medical Advisory Committee, Department of Public Welfare, State of Florida; Member, State Board of Directors, American Cancer Society; Past Director of Marion County Tumor Clinic; Member, Legislative Committee of the Florida Medical Association; Vice President of the Florida Medical Association; Member, Blue Cross Board of Directors; President, Florida Medical Foundation; American Medical Association Education Research Foundation (ERF) Chairman for the State of Florida; Member of American Academy of General Practice, Southern Medical Association, Academy of International Medicine, and American Society of Abdominal Surgeons; Member, Governor's Steering Committee on Health; Fellow of the Southeastern Surgical Congress; and

WHEREAS, This devoted physician has had a prominent role in community affairs, serving as district chairman of the YMCA; as director of the North Florida Society of Crippled Children; as board member of the Harry Anna Crippled Children's Home; as member, Athletic Advisory Council, University of Florida Alumni Association; on Board of Directors, Golden Hills Academy; as member, Association of Seaboard Coast Line Railway Surgeons; as team physician, Ocala High School football team; as Deacon, First Presbyterian Church, Ocala, Florida; is an active member in the Kiwanis Club and Elks Club; member, Ocala Committee of 100; President, Ocala Golf Association; member, State Chamber of Commerce and director of United Appeal; therefore be it

RESOLVED, That the Certificate of Merit, the Association's highest honor, be presented to this fine gentleman, eminent member of the Association, and dedicated community and professional leader, in recognition of his unselfish and generous expenditure of time and effort throughout the years on behalf of the public, the profession and the Association.

Dr. Cleveland asked Dr. Wilbur Sumner to escort Dr. Thad Moseley to the rostrum. He then presented the Certificate of Appreciation to Dr. Moseley.

Dr. Moseley: "You have no secrets when you work hard and someone thinks you worked hard. I did not think most of you knew my full name, but now you do.

"There are several things I believe important for each of you to know. These are things I have learned as I have worked with you. One of the nicest things was getting to know many of you and getting to know those people who are willing to give of their time and effort to carry on the scientific part of this work. I was very pleased when someone stood to defend the fact that the FMA is also interested in scientific effort. The minute we are not, we are a trade union. Please remember this and please do support fully those who are interested in the scientific aspects of medicine and do your part to make our medical association the best scientific arm of our profession."

Certificate of Appreciation

WHEREAS, Thaddeus Mortimer Moseley III, M.D., a respected member of the Florida Medical Association for almost two decades, has made an invaluable contribution to the health and well-being of the people of Florida, and merits special recognition for his achievements, and

WHEREAS, This distinguished physician, born in West Point, Mississippi, in 1919, attended local public schools; received his premedical education at the University of Mississippi in 1939 and the degree of Doctor of Medicine from Vanderbilt University in 1943; completed an internship and a residency at Vanderbilt Hospital in Nashville, and

WHEREAS, This outstanding physician served admirably in the Army Medical Corps during the entire European campaign of World War II, and

WHEREAS, This noted physician began the practice of general surgery in Jacksonville in 1950, and became chief of surgery at Riverside Hospital and Duval Medical Center, and

WHEREAS, This devoted physician has served his profession as editor of the Journal of the Florida Medical Association; chairman of the Committee on Scientific Work; chairman of the Scientific Council; Chairman, Council on Specialty Medicine groups; member of the advisory committee to the State Medical Journal Advertising Bureau and member of the special committee on policy for SMJAB; Civil Defense and Program Chairman for the Duval County Medical Society, and

WHEREAS, This dedicated physician holds memberships in the Duval County Medical Society, American Medical Association, Southern Medical Association, Southeastern Surgical Congress, American College of Surgeons, Florida Association of General Surgeons, Alpha Omega Alpha, Southern Surgical Association; Southern Surgeons Club, and

WHEREAS, This scholarly physician served as associate professor of clinical surgery at University of Florida and has authored various scientific articles; therefore be it

RESOLVED, That the Certificate of Appreciation, established in 1961 for the purpose of acknowledging exceptionally meritorious service and awarded now for the fourth time, be presented to this outstanding member of the Florida Medical Association in recognition of his many contributions to the people of this state and nation, and to the profession of medicine.

The Vice Speaker, Dr. Charles K. Donegan, took the Chair.



Dr. Thad Moseley displays the Certificate of Appreciation presented to him by Dr. Cleveland.

Report of Reference Committee No. IV
Legislation and Miscellaneous

Dr. Reed Bell, Chairman: "Mr. Speaker, Mr. President and Members of the House of Delegates:

"Your Reference Committee No. IV met and listened to all those who wished to be heard on matters referred to this committee.

"The Committee's recommendations on each item will be submitted separately and we request that each item be acted upon separately before proceeding to the next."

Council on Legislation and Public Agencies

Dr. Bell: "There were many items under the report of this Council which were considered separately and since some of the resolutions dealt with the same subjects, they were considered at the same time.

Committee on National Legislation.—The Reference Committee was pleased to note that our representatives and senators from Florida have been apprised of the interest of Florida physicians in federal legislation.

"The Reference Committee recommends that this report be received as information with special commendation to the Committee on National Legislation."

Motion carried.

Committee on State Legislation.—Before considering the report of this committee, your Reference Committee wishes to recommend to this House of Delegates special commendation and appreciation to Dr. Edward G. Haskell Jr. of Tallahassee. He has served as chairman of this committee at considerable personal sacrifice. It was brought out by testimony in our Committee that he devoted practically full time to the service of this committee during the legislative session.

"We also wish to thank Dr. Sanford Mullen for taking over this work in the middle of a very busy legislative session.

"Your Reference Committee recommends that more physicians volunteer their services in the 'Doctor of the Day' program. It also noted with interest the visiting day for the Woman's Auxiliary, which should be commended and encouraged. The Key Contact physicians also should be commended for their support.

"Medical Practice Act.—It is recommended that active support of our efforts to pass the revised medical practice act should be continued, and it was the feeling of your Reference Committee that the injunctive power for the Board of Medical Examiners is an essential provision to be included in this act."



Members of Reference Committee IV were (left to right) Drs. Francis C. Coleman, Tampa; Reed Bell, Pensacola (Chairman); David C. Lane, Fort Lauderdale, and Wilbur C. Sumner, Jacksonville.

Motion carried.

Dr. Bell: "Basic Science Law. There was a great deal of discussion on this subject. It was the consensus that the present policy of the Florida Medical Association should be retained; i.e., that the Basic Science Law should be retained to include all practitioners of the healing arts. If this cannot be accomplished, we believe that any modification of the Basic Science Law to include some practitioners and exclude others would not be desirable. Therefore, if the present Basic Science Law cannot be retained, it is recommended that the proficiency of doctors of medicine in the basic sciences be made the responsibility of the State Board of Medical Examiners."

Dr. Walter W. Sackett: "I think this goes a little deeper than it would appear on the surface. It looks very rosy here, but let me remind you that last year you gave a unanimous decision that you would stand in back of the Basic Science Law 100%. I have found that there has been far less than unanimous support, in fact there has been an indifferent attitude by those who should be working for the mandates of this House.

Dr. Sackett then proposed an amendment to the Reference Committee report: "That we approve any modification of the Basic Science Law which would apply to all the presently included practitioners." He did not, however, have his amendment in writing.

Dr. Quehl: "The previous House of Delegates mandated that the Basic Science Law be retained. I was assigned the responsibility—I was empowered to make certain arrangements with other groups. In return for their support, I promised our support. Now someone is pulling the rug out from under us. You cannot change the policy on the people you have sent up there to get this policy enacted; I would hate to be a party to such a deal."

Dr. Sackett: "We have agreed to a compromise which would accept part I of the National Boards in lieu of the Basic Science examination, but this must be presented through the present Board of Basic Sciences and must be acceptable to them. Also, I have added an amendment that the National Board must have been taken within the previous ten years."

The Vice Speaker deferred action on Dr. Sackett's motion until he had time to put it in writing. (For final action, see page 537).

Resolution 69-28

Basic Science Examination
(Not Approved)

Dr. Bell: "It is recommended that Resolution 69-28, Basic Science Examination by the Collier County Medical Society, not be approved."

Motion carried.

Dr. Bell: Therapeutic Abortion.—The Committee was advised that this bill, which was a part of our scheduled legislative program was killed last night in the Judiciary Committee by one vote. Despite this defeat, the bill remains alive in the Senate. It is recommended that the members of the Florida Medical Association contact their legislators and the Governor of Florida urging them to support the Therapeutic Abortion Bill."

Dr. William T. Mixson Jr., Dade: "I would like to present an amendment to be added to the Reference Committee report:

"Whereas, It is widely known that the subject of modification of Florida's antiquated abortion laws is a highly emotional issue, but is of extreme importance to all citizens of this state and of special importance to the medical profession in the interest of their patients' health and welfare; Therefore be it

"RESOLVED, That the President of the Florida Senate, the Chairman of the Senate Committee on Judiciary, and the entire Florida Senate be urged to exercise their legislative responsibilities in the interest of the majority of citizens of this state by passage of permissive legislation to permit therapeutic abortion based on medical indications and proper consent of the patient."

Motion to add this amendment carried.

The report of the Reference Committee as amended carried.

Dr. Bell: Supplemental Report of the Committee on State Legislation.—Dr. Mullen's oral supplemental report on State Legislation, in which he mentioned the bill on insurance contracts which would prohibit any discrimination against members of any of the healing arts—a device to include chiropractors in government medical programs—was defeated. The Statewide Medical Examiners System legislation is progressing well and deserves our strong support."

This was accepted as information.

Council Report

JERE W. ANNIS, *Chairman*

Committees:

Committee on National Legislation—The rapport estahlished over the years hy our Florida Key Contact Physicians contributed greatly in decelerating the massive socialized medical programs. Through FMA prodding, we can anticipate continuing reorganization of HEW as they attempt to consolidate, examine and realign all federal health programs.

The score hoard of puhlic laws enacted of medical interest:

85th (Eisenhower)	18	
86th (Eisenhower)	16	
87th (Kennedy)	31	
88th (Kennedy & Johnson)	29	
89th (Johnson)	42	including Medicare
90th (Johnson)	31	

Our annual entourage to Washington March 4-5 helped cement our basic philosophy with our two senators and 12 congressmen, and at the time of our visit the following national legislation was discussed:

1. Heart, Cancer, Stroke (RMP) & Hill-Burton—Last year RMP was extended for two years and Hill-Burton Program for one year. Currently pending is the Hospital Modernization and Construction Act of 1969 which provides a three-year extension of the Hill-Burton construction and modernization grant program for hospitals and other health facilities. The proposal contains a loan guarantee program for the construction of hospitals and other medical facilities and a loan program for the construction and modernization of public hospitals.
2. Medicare—Disahled, Chiropractic, Drugs—Numerous proposed amendments calling for coverage of all disabled under Medicare, addition of chiropractic services, and to add certain drugs as henefits under Medicare may he expected in 1969. Recently 31 senators sponsored legislation to provide Medicare heneficiaries prescription drugs at prices approved by the secretary of HEW.
3. Freeze on MD Fees and Aiken Bill—The Social Security Administration has directed all Medicare Part B carriers to freeze MD fees for 18 months. Legislation is now appearing which could cement such action into law. There is a pending hill with reference to average charges paid hy local Blue Shield plans by geographic areas and authorizes Social Security to issue public fee schedules. This legislation would also waive the $50 deductihle and 20% co-insurance.
4. Health Insurance—Tax Credits—The first bill reflecting the sense of AMA's San Francisco resolution re voluntary health insurance premium tax credits has been introduced. This legislation would have the federal government assume the total cost of public assistance medical care for those persons with little or no income, and would grant tax credits on a sliding scale to taxpayers depending upon the level of an individual's income or the income of a family unit. Credits for taxpayers would range from 75% down to 25%.
5. IRS Tax—Advertising Income, Journals—Most state and county medical associations and societies including AMA this year will pay up to a 48% tax on net advertising income from journal operations. This new liahility was estahlished hy IRS regulations which were not authorized hy any act of Congress.

In addition, the congressional delegation was apprised of Florida physicians' interest with reference to legislation sponsored hy chiropractors, which is intended to provide equalization of all insurance henefits with special interest toward Workmen's Compensation henefits. They were also apprised of medicine's interest in seeking legislation to provide immunity from civil lihel for memhers of utilization review committees which are required under the HEW regulations for the Medicare and Title XIX Medicaid programs.

Committee on State Legislation—Activities of the committee during the past year included a committee meeting in Tampa on Octoher 27, 1968 at which time representatives of county medical societies and the various specialty organizations attended. The committee also sponsored a state legislative workshop conference at the time of the January 25-26 Annual Conference of Presidents and Secretaries. At hoth the committee meeting and the conference, specific items of the FMA legislative program were discussed in detail.

In preparation for the 1969 regular session of the Florida legislature, which convened April 8, county medical societies have furnished names of key contact physicians for each of their state legislators. FMA legislative activities during the session include continuation of the program of volunteer physician for the day, a visiting day for the ladies' auxiliary, the maintaining of a legislative office in Tallahassee for the entire session and the mailing of periodic legislative hulletins summarizing status of bills sponsored hy and of interest to the medical profession.

It is recognized that it is not only important but vital to the success of the FMA legislative program to have each county medical society furnish a list of names of key contact physicians who are personal acquaintances and/or family physicians for state senators and representatives. The "physician for the day" program, which was initiated during the 1967 session, proved to he most successful. It is hoped that an increased numher of interested physicians will plan on visiting the legislature while in session to volunteer their assistance for "physician of the day" in manning the legislative dispensary and to become hetter informed of legislative activities. Legislation to he sponsored hy FMA includes the following hills which have heen prefiled or are pending introduction:

1. Revision of Medical Practice Act
2. Basic Science Law
3. Implementation of Title XIX, Medicaid Program for Florida
4. Utilization Review Committees
5. Blood Banking
6. Therapeutic Ahortion
7. Naturopathy Identification.

Other legislation of extreme interest to the medical profession and which will he followed closely is with reference to the following:

1. Reorganizaiton of the departments of government with reference to the State Board of Health and Board of Medical Examiners.

2. Repeal of tax exempt status for real property owned by charitahle and scientific organizations, which includes Florida Medical Association and county medical societies' properties.

3. Repeal of the real property tax exemption for Blue Cross-Blue Shield.

4. Fitting of contact lenses only upon prescription of M.D.'s, D.O.'s and Optometrists.

5. Statutory authority prohibiting discrimination against osteopaths to practice in public hospitals.

Resolution 69-18

Dr. Bell: Title XIX—Medicaid.—Under the general topic of Medicaid two separate items were considered: Board of Governors Action No. 8 and Resolution 69-18, Tax-Supported Health Services

by Hillsborough County Medical Society.

"The Reference Committee recommends approval of both Board Action No. 8 and Resolution 69-18 and also recommends that the Board of Governors recognize the need to continue following the implementation of this program by referring it to the appropriate committee for consideration." (See Board of Governors report, page 512)

Motion carried to approve Board Action No. 8 and Resolution 69-18.

Tax-Supported Health Services
Hillsborough County Medical Association

RESOLVED, That the Hillsborough County Medical Association strongly recommends that in the re-organization of the state government, tax-supported health services for all state agencies, including Title XIX, should be provided by one state medical care system under the direction of a single health agency, and should not be under the direction of the welfare or social service agency or fragmented among several agencies.

Resolution 69-27

Dr. Bell: "Resolution 69-27, Medicaid, by J. Gerard Converse, Delegate, was carefully considered and the Reference Committee recommends adoption of a substitute resolution." Dr. Bell read the substitute resolution.

Dr. Converse: "I would like to speak against this watered-down resolution. I think it would do little good to say we would like to have usual and customary fees since the Department of Health, Education and Welfare has already said it would limit payment to the lowest Blue Shield contract which in our case would be the "J" contract. Also, Senator Aiken is working to have Medicare paid on the same basis as Medicaid. Eventually this program will take in everyone and we will wind up with an absolutely impossible fee schedule. I recommend that we not accept the watered-down version, but tell the legislature in Tallahassee that this type fee schedule is unacceptable to us."

Dr. David C. Lane, Broward: "I am in sympathy with the doctor from Polk County. Unfortunately, if we passed this resolution, we would be reversing our stand. We have worked hard for the implementation of Title XIX; now we would be saying that we are not in favor of Medicaid unless we can have it the way we want it."

Dr. Everett Shocket, Dade: "I would like to amend the first 'Resolved' to delete the words 'continue to strive' and state, 'the Florida Medical Association insists on reasonable usual and customary fees.' "

This amendment carried.

Dr. Dean, Pinellas: "The third 'Whereas' in this substitute resolution is inaccurate and contrary to some other House actions. I move that it be deleted."

Motion carried to delete the third "Whereas."

Motion carried to approve the substitute resolution as amended.

Title XIX — Medicaid
(Substitute Resolution)

Whereas, It is quite probable that Title XIX of Public Law 89-97 Medicaid will become effective in Florida this year; and

Whereas, The Department of Health, Education and Welfare has indicated that it plans to impose fee schedules on the entire Medicaid program, basing federal payments to physicians on local or regional Blue Shield schedules; and

Whereas, Only in the areas of health and welfare has the federal government continuously failed to recognize and failed to pay for usual and customary charges; Therefore, be it

RESOLVED, That the Florida Medical Association insists on reasonable, usual and customary fees under the Medicaid program and all other government medical programs, and further be it

RESOLVED, That copies of this resolution be forwarded to the American Medical Association, the individual members of the FMA, the Governor of the State of Florida and appropriate federal officials.

Dr. Bell: Utilization Review Committees.—Although the Reference Committee was advised that this part of our legislative program will probably not pass at this session of the legislature, the Committee recommends that we continue to strive for immunity from legal liability for members serving on Utilization Review Committees and any other committees that may be required by law. Also, if this legislation fails to pass, it is recommended that individual hospitals be urged to provide insurance coverage to protect the physicians serving on these committees from legal liability. We would also like to inquire into coverage under FMA liability insurance for this type of liability."

This was accepted as information.

Resolutions 69-20 and 69-21

Government Reorganization

Dr. Bell: "Board of Governors Action No. 6; Resolution 69-20; Statement of Policy, Department of Health Services Under Reorganization, and Resolution 69-21, Statement of Policy, Regulatory Boards, were considered at the same time. Your Reference Committee recommends approval of this statement and these two resolutions as printed in the Handbook."

Motion carried.

Resolution 69-20

Statement of Policy
Department of Health Services Under
Reorganization
Board of Governors

RECOMMENDED PLAN FOR GROUPING HEALTH ACTIVITIES IN ACCORDANCE WITH THE CONSTITUTIONAL MANDATE ON STATE GOVERNMENTAL ORGANIZATION

I. All functions relating to the health protection of Florida's residents and visitors should be grouped in a single health agency. This executive department should be headed by a board made up primarily of members of the health professions appointed by and serving at the pleasure of the Governor. This "Board of Health Services" should have supervision of all matters relating to the public health. Rules and regulations adopted by the Board of Health Services for protection of the population should supersede those of all other State departments or other units of State and local government.

The health agency should have responsibilities for and give particular emphasis to the following:

(1) Prevention and control of communicable diseases in man

(2) Prevention and control of other diseases, conditions and environmental factors which exert a deleterious effect on man's health and well being

(3) Informing the populace on all matters pertaining to public health

(4) Community health problems of all kinds including cooperative functions with local health departments and other units of local government which may be involved in health activities

(5) Medical services provided at government expense. The new health agency should retain all present State Board of Health responsibilities plus those health responsibilities of other agencies which fall in the categories outlined above. These would include activities relating to disease prevention and control, environmental health functions and/or community health services of the following:

(a) Crippled Childrens' Commission
(b) Community Mental Health Services
(c) Education and information on narcotics and drug abuses
(d) Air and Water Pollution Control
(e) State Tuberculosis Board
(f) Division of Community Hospitals and Medical Facilities
(g) Division of Vocational Rehabilitation
(h) Public Health Sanitary Inspection
(i) Council for the Blind
(j) Alcoholic Rehabilitation
(k) State Mental Hospitals and related institutions, such as those for mental retardation

II. To provide maximum coordination and efficiency, all other health services (including hospital care, professional services, counseling, drugs and appliances) paid for at public expense by other state agencies should be contracted for through the new health agency. (Central purchasing of health services).

Resolution 69-21

Statement of Policy
Government Reorganization—Regulatory Boards
Board of Governors

Recognizing that the practice of professions is a privilege granted by legislative authority and is not a natural right of individuals, it is deemed necessary by the legislature in the interest of the public to provide laws and provisions covering the granting of that privilege and its subsequent use, control and regulation to the end that the public shall be properly protected against unprofessional, improper, unauthorized and unqualified practice of the professions and from unprofessional conduct by persons licensed to practice the professions in Florida.

The foregoing principle having been agreed upon, the Florida Medical Association requests the respective Committees on Governmental Reorganization of the House and Senate to approve legislation under the newly adopted Florida Constitution a reorganization program encompassing the professions' regulatory boards in a manner that will guarantee the following:

(1) That professional regulatory boards shall be responsible to the Governor and appointments to such board shall be made by the Governor

(2) Retain the respective professional boards' authority, integrity and responsibility in the determination of licensure, the qualifications of applicants, administration of examinations, investigative and disciplinary procedures, confidentiality of records, and enforcement of the governing statute and rules of the Board

(3) Professional decisions and determinations shall be made by qualified members of the respective professions. Executive staff personnel shall be selected by the respective boards

(4) The present policy be continued whereby the activities of professional boards be financed totally by fees collected from the individual professions for their boards, and that any future fees and budgets be segregated and appropriated in direct proportion to the board recommended and approved budgets of the individual professions.

Council on Medical Services

Dr. Bell: "Your Reference Committee recommends that the recommendation No. 3 of the Committee on Mental Retardation be approved as printed in the Handbook." (See report of Council on Medical Services, page 500)

Motion carried.

Dr. Bell: "Your Reference Committee recommends approval of recommendation No. 10, State Board of Health Legislative Proposals in the report of this Council." (See report of Council on Medical Services, page 500)

Motion carried.

Dr. Bell: "The Reference Committee approved recommendation No. 14 of the Committee on Public Health regarding a Single Health Agency as printed in the Handbook." (See report of Council on Medical Services, page 500)

Motion carried.

Judicial Council

Dr. Bell: "The Reference Committee recommends approval of Recommendation No. 6 of the Judicial Council on Superboard Legislation." (See report of Judicial Council, page 516)

Motion carried.

Council on Specialty Medicine

Dr. Bell: "The recommendation of the Council on Specialty Medicine, No. 6, on Legislative and Other Governmental Regulatory Agency Hearings was considered and your Reference Committee recommends approval with the following amendment:

"At the end of the paragraph, following the word 'notified,' add the following: 'and chairmen of county medical society legislative committees, if time permits; and that adequate funds be provided for the legislative activities in Tallahassee.' " (See Council on Specialty Medicine report, page 494)

Motion was carried.

Flampac

Dr. Bell: "It was also brought out in the hearing that FLAMPAC has done a good job with the funds available, but we should encourage support of FLAMPAC so as to permit expansion of its activities and influence."

This was received as information.

Blood Banking

Dr. Bell: "The Reference Committee wishes to recommend a substitute for paragraph 2 of the report of the Committee on Blood as follows:

"That the Association continue its active support of proposed legislation which would define blood banking as a service rather than the sale of a commodity."

Motion was carried.

Plasmapheresis

Dr. Bell: "In our hearing, there was a discussion of plasmapheresis and testimony was presented indicating that the Florida Association of Blood Banks has recommended that there be a state conference on plasmapheresis with the Florida State Board of Medical Examiners, the Florida State Board of Health, the Florida Association of Blood Banks and other organizations as participants, and your Committee recommends that such a conference be supported and that any legislation regarding plasmapheresis be deferred until after this conference."

Motion carried.

Resolution 69-24

At this time the House also considered Resolution 69-24, Plasmapheresis, which had been recommended for amendment and approval by Reference Committee No. II. (See page 508)

Motion was carried to approve this resolution as amended by Reference Committee II.

Plasmapheresis
Okaloosa County Medical Society

RESOLVED, That the Okaloosa County Medical Society commissions its delegates to the Florida Medical Association to support and encourage those resolutions and proposals which would define "Plasmapheresis Labs" as the practice of medicine within the State of Florida and requiring the direct control and supervision by a duly licensed practitioner of medicine.

PKU Testing

Dr. Bell: "Questions were raised in the Reference Committee about Recommendation No. 6 of the Committee on Mental Retardation about the necessity of increased funding for this program to establish PKU diagnostic centers; therefore, the Reference Committee recommends that this be referred to the Board of Governors for further study." (See Council on Medical Services report, page 500)

Motion to refer to the Board of Governors was carried.

Resolution 69-29

Dr. Bell: "Resolution No. 69-29, Hospital Medical Staff, Palm Beach County Medical Society. Your Reference Committee is in accord with the intent of this resolution and the accompanying House Bill 1705, but realizing that the Judicial Council has this whole subject under continuing study, we recommend that it be referred to the Board of Governors for their consideration, since we do not believe it is appropriate to endorse the language of a specific bill at this time."

Dr. Sackett: "I move that following the word resolution, we strike the word 'realizing' and insert 'and approve the principle stated in House Bill 1705' and then strike the remainder of the sentence, so this recommendation would read:

"Your Reference Committee is in accord with the intent of this resolution and approves the principles stated in House Bill 1705 and realizes that the Judicial Council has this whole subject under continuing study."

Motion to amend carried.

Dr. M. Eugene Flipse, Dade: "The FMA has gotten in trouble before by endorsing something without full knowledge. If you are going to endorse this bill, we should have it thoroughly studied before it is submitted. This has been partially covered in Reference Committee No. III. I would urge that it be referred to the Board of

Governors to clean it up and submit it next year. I am in accord with the need to defend our rights, but I don't think we should submit a poor bill."

Dr. Zellner: "I agree with Dr. Flipse, while I am also in sympathy with Dr. Sackett. We are asked to buy a 'pig in a poke.' This is something which we may need very badly, but we don't know enough about this bill."

Motion carried.

Hospital-Medical Staff
Palm Beach County Medical Society

(Approved in Principle)

Whereas, Hospitals evaluate an applicant to their staff by use of credential investigation and probationary staff membership; and

Whereas, Satisfactory credentials and satisfactory probationary performance leads to the bestowal of privileges on a qualified applicant and the bestowal of staff privileges upon an applicant by a hospital effects two commitments, to wit:

(a) the endorsement of the physician to the community allowing the placement of the sacred trust of health care in the physician, and

(b) the use of the hospital facilities by the physician in order that he may develop and maintain a following of patients to whom he can minister to the extent of his abilities and qualifications; and

Whereas, Except by virtue of the mental, moral or professional deterioration of staff member, the withdrawal of that member's privileges effects the abandonment of the commitments referred to above and, thereby, causes a loss of public faith in both the physician and the hospital; now, therefore, be it

RESOLVED, That the Florida Medical Association endorse and actively support the proposed Florida legislation known as HB 1705 which limits withdrawal of hospital staff privileges.

Dr. Bell: "The Reference Committee also wishes to suggest that each medical staff study the by-laws of its hospital and, if necessary, amend them in such a manner that the recommendation for appointment to or rescinding of hospital privileges is made through the medical staff of the hospital."

Motion carried.

Resolution 69-32

Dr. Bell: "On Resolution 69-32, Health Education, by the Dade County Medical Association, the Reference Committee recommends that the 'Resolved' of this resolution be amended as follows:

"RESOLVED, That the House of Delegates in official session goes on record as approving legislation which will favor the total approach to health education."

Health Education
Dade County Medical Association

Whereas, In 1967 the House of Delegates of the Florida Medical Association at its Annual Meeting passed a resolution calling for a well planned total health education program in public schools with well prepared teachers, and

Whereas, The problems in the area of health education this year are even more evident, therefore be it

RESOLVED, That the House of Delegates in official session goes on record as approving any legislation this year which will favor the total approach to health education.

Resolution 69-34

(Referred to Board of Governors; later withdrawn by Dr. Sackett)

Dr. Bell: "Resolution 69-34, Narcotics Clinics, was introduced by Dr. Walter Sackett at the first meeting of the House by unanimous consent.

"Your Reference Committee recommends approval in principle for legislative action the subject of drug abuse and treatment or rehabilitation for drug addicts, but we do not feel that the Florida Medical Association should endorse any specific bill. We recommend that this be referred to the Board of Governors for study with the suggestion that it be referred to the Committee on State Legislation for guidance."

Dr. Walter Sackett moved that it not be referred.

Motion of the reference committee to refer was carried.

Later, by consent of the House, Dr. Sackett withdrew his resolution No. 69-34 and the bill which accompanied it from any further consideration by the Board of Governors or the House of Delegates.

Board of Governors Actions

Dr. Bell: "Your Reference Committee recommends that Board of Governors Action No. 20 regarding the Florida Clinical Laboratory Act be received as information." (See Board of Governors report, page 512)

Motion carried.

Dr. Bell: "Your Committee recommends that Board of Governors Action No. 26, Joint Commission on Accreditation of Hospitals, be received as information." (See Board of Governors report, page 512)

Motion carried.

Resolution 69-2

Labeling of Prescriptions

(Not Approved)

Dr. Bell: "Your Reference Committee recommends adoption of Resolution 69-2 on Labeling of Prescriptions, by Brevard County Medical Society."

Motion was not carried and this resolution was not adopted.

Resolution 69-8

Dr. Bell: "Your Reference Committee approves the idea that the practice of podiatry be limited to its area of competence and recommends that this be referred to the Board of Governors for further study."

Motion was carried.

Definition of Podiatry
Orange County Medical Society, and, Louis P. Brady, M.D., Delegate

(Referred to Board of Governors)

Whereas, The Florida Podiatry Association in its legislative program for 1969 has sought to expand the definition of Podiatry as conveyed in Chapter 461.01 of the 1967 Florida Statutes, and

Whereas, The Present Statute 461.01 already broadly defines Podiatry to include medical, surgical, palliative, and mechanical treatment, and

Whereas, This definition gives unregulated license to a very narrow field of medical care, and

Whereas, Other states, in particular Wyoming, Statutes Title 33-122 to 33-133, have in their wisdom seen fit to limit rather than expand the definition of Podiatry,

RESOLVED, That the Florida Medical Association recommends to the Legislature of the State of Florida the following definition:

DEFINITION

"A chiropodist, also known as a podiatrist, is defined as one who for hire, or reward, examines and diagnoses ailments of the human foot, and practices:

1. Minor surgery upon the feet, limited to those structures of the foot superficial to the inner layer of the fascia of the foot.
2. The palliative and mechanical treatment of the deformities and functional disturbances of the feet, but it shall not confer the right to treat communicable or constitutional diseases of the bones, ligaments, muscles, or tendons of the feet or any other part of the body, or to perform any operation on the bones, ligaments, muscles or tendons of the feet involving the use of any cutting instrument or the right to use any anesthetic other than local."

Resolution 69-22

Dr. Bell: "The Reference Committee recommends that Resolution 69-22, Package Inserts, be adopted as printed in the Handbook."

Motion carried.

Board of Governors

PACKAGE INSERTS

Whereas, In a recent malpractice suit the package insert of a drug was allowed to take the place of expert medical opinion concerning a question of side effects, and

Whereas, The Federal Drug Administration's Bureau of Medicine dictates drug dosages and side effects through its control of the package insert, and

Whereas, This dictation is monopolistic and at the exclusion of all other well recognized commentaries on drug dosage and side effects, and

Whereas, Any physician who administers a drug in any dosage other than that given on the package insert is liable for malpractice action, and

Whereas, Researchers, authors, editors and publishers who have written and approved dosages other than those on the package insert are liable for damages; therefore be it

RESOLVED, That all package inserts shall bear the following statement:

"The drug dosages recommended herein represent the Food and Drug Administration's opinion of appropriate dosages based on its clinical experience. The reader is referred to other reliable sources for significant details regarding usual dosage, side effects, contraindications and warnings."[1]

be it further

RESOLVED, That copies of this resolution be sent to the Journal of the FMA for publication, to the American Medical Association Council on Drugs, and to the American Pharmaceutical Association.

[1]Chayet, Neil, LLB, New England J. Med. 277:(23)1253-1254 (Dec. 7) 1967.

Council on Allied Professions And Vocations

Dr. Bell: "On Recommendation No. 4, Podiatry, by the Council on Allied Professions and Vocations, the Reference Committee was assured that no such legislation has been introduced at this session of the Legislature, therefore, recommend that this be referred to the Board of Governors for further study." (See report of Council on Allied Professions and Vocations, page 499)

Motion carried.

Dr. Bell: "Recommendation No. 6 of the Council on Allied Professions and Vocations on Physical Therapy was considered and your Reference Committee recommends that this be received as information as we were assured that this bill has been killed." (See Council on Allied Professions and Vocations report, page 499)

Motion carried to receive as information.

Comprehensive Health Planning

Dr. Bell: "The Reference Committee recommends that the report of the Ad Hoc Committee on Comprehensive Health Planning be accepted with commendation and that the county medical societies and the Florida Medical Association continue to interest themselves in this field so that the medical profession will have a voice in Comprehensive Health Planning. We also urge physician participation and insist upon the representation allowed by law of 49% providers."

Motion carried.

Special Report

1. Ad Hoc Committee on Comprehensive Health Planning

SAMUEL M. DAY, *Chairman*

Planning is a process that we as individuals have regarded with varying degrees of thought and discussion throughout our lives, but on a community and state level,

with few exceptions, we have had little experience with it. When it comes to concrete inauguration of planning procedures we find that there is not much that we know about it, so that we have to plan how to plan. It is ironical that this peculiar circumstance results from Federal prodding, since for much of the past three decades the Federal government has been playing down individual planning, discouraging individual initiative, savings, etc., while attempting to do more and more for the people. Possibly this planning process is not too ironical after all since it is part of the "group effort" which has been predominantly the Federal way since New Deal days. It represents a unique turn of events that the planning mechanism is being handed to states and local communities to do with as they see fit so long as adherence to certain Federal ground rules is observed.

To say that planning is necessary is to put it mildly, particularly in our State of Florida which is growing at the rate of 250,000 inhabitants per year, making it one of the fastest growing states in the nation. From previous studies we know that in each 1,000 new residents we have 67 aged, 19 blind, 16 alcoholics, 11 juvenile delinquents and 30 mentally retarded children for whom adequate personnel and facilities in health fields must be available.

Planning denotes expectation of change. Actually, nothing is more inevitable than change and our life span has witnessed more of it than all the rest of time combined, yet there is a natural inclination to resist change because preformed habits are hard to break. On the other hand, all change is not necessarily good so the dilemma of the conscientious planner is multiplied. Our researchers and students see things through idealistic eyes. Others who may be older and "a bit hidebound" take a more selfish approach. We in Health Planning must be doubly careful not to do more harm than good, because our heritage has given us the finest health services in the world regardless of statements to the contrary being made by a few hardcore "socializers" during recent years. They have not told you that the Swedes of Minnesota are healthier than the Swedes of Sweden. Those infant mortality rates which reflect against us are not comparing the same things in foreign countries as in America. Somewhere along the line someone is probably guilty of misrepresentation of the facts in using statistics in a manner more derogatory than our nation deserves, but I like to believe that most people who use them are simply misled in failing to realize the comparisons are not the same. Fortunately, ours is still a country that students and graduates from all over the world visit in order to learn the best medicine available today. If we planners are able to keep our facts in proper perspective, it may always be so.

Great influences are being brought to bear to do away with the private practice of medicine, which has been the dominant method of practice in America for three centuries. The question is raised, "Which is the best method of delivering health services to the greatest number of people?" The push is on to develop group practice, prepaid practice and other systems which have their place, but which should be fairly evaluated before they are forced on all our people. Prepaid systems have been the favorites of the federalizers, but their growth has not indicated any overwhelming public acceptance except as health insurance. Actually, the Kaiser Plan is the only prepaid deliverer of medical services which has shown any appreciable growth and it has increased in proportion to the growth of the State of California. This is true even though it has had help from various groups, foundations and government agencies.

My statements are meant simply to counterbalance statements that have been rather flagrantly made during the past few years with little answer from those knowing the other side of the story. My plea is that we make evaluations in depth in planning the Health Services, Health Facilities and related matters for Florida. Our plans and those of Florida localities must have wholehearted cooperation of health enterprises or they must be given legal "teeth" if positive measures are to result. Let us hope it will be the Voluntary Cooperative way.

As chairman of the Florida Health Advisory Council, I wish to thank those physicians serving on the Executive Committee with me, Drs. Irving Hall, George Palmer and Wilson Sowder, for their untiring efforts and valuable contributions to our work.

Our committee extends its thanks to the several county medical societies which have taken the leadership in comprehensive health planning in their respective areas and urge every other county medical society in Florida to do likewise.

Basic Science Law

Dr. Sackett again presented his amendment regarding the Basic Science Law which he was now ready to present in writing as follows:

"We approve any modification of the Basic Science Law which would apply to presently included practitioners; therefore, we reaffirm our stand on the basic science law or any acceptable modification which would apply to presently included members of the healing arts."

Motion was seconded.

Dr. Flipse: "I rise to oppose this amendment because we have insisted and I think rightly so that all three practitioners in question take the same examination. If we permit this flexibility with the Basic Science Law, which has written into it that the chiropractors can pass their own basic science exam, which they have created and which they have graded, and then have it sent through the Board of Basic Sciences, they are going to be in a very difficult position when State Boards and others have licensed these people already and I think the reference committee said, 'if we are not going to all take the same exam, let the Board of Medical Examiners decide who is competent to practice medicine and not split the Board.

Dr. Quehl: "The cold basic fact is that the Board of Examiners in the Basic Sciences and the basic science examination as we know it, will die unless some alternative legislation is acceptable. We have worked out an alternate proposal that provides for consideration of the National Board examinations, part 1. The results of this examination would have to be considered by our Board of Basic Sciences and the acceptable score would be decided by our Board. In other words, we can keep pretty much what we have if we will accept this alternate type legislation, which does have a chance of passing."

Dr. Russell B. Carson, Broward: "Gentlemen, we have fought for this Basic Science Board since 1939. It is still just as important to us as it was then. There has been no reason to change, or to liberalize it or to water it down, or to provide substitutes for it as long as it works as efficiently as

it has. I would hate to see us do anything except reaffirm what this House did last year."

Dr. Sackett's amendment was passed.

Dr. Bell: "This completes the report of Reference Committee No. IV, Legislation anl Miscellaneous.

"The Chairman would like to express appreciation to Drs. Wilbur Sumner, Frank Coleman and David Lane, whose wise counsel made the compilation of this difficult report so much easier than it might have been. He would also like to thank the secretary, Mrs. Mason, and all those who attended our meeting and expressed their views, on which many of our decisions were based."

Report of Reference Committee No. V
Medical Economics

Dr. Russell B. Carson, Chairman: "Mr. Speaker, Mr. President, Members of the House:

"Reference Committee No. V spent from 2:30 to 5:30 in hearing all those who desired to be heard on matters referred to us.

"The Committee's recommendation on each item will be submitted separately and we request that each item be acted upon separately before proceeding to the next item."

Council on Medical Economics

Dr. Carson: "We accept the Council on Medical Economics report and its consideration of the various committee reports with the following three recommended changes in the report:

"Recommendation No. 1. Under the report of the Committee on Members Insurance, wherein a recommendation of the committee was made 'that a resolution be passed requesting all hospitals to delete from their requirement for staff privileges the disclosure of liability coverage,' your Committee desires to recommend the deletion of paragraphs 7, 8 and 9 on page 59 and paragraphs 1 and 2 on page 60 and to substitute the following resolution:

"RESOLVED, That all hospitals, delete from their requirements for staff privileges the necessity to disclose the limits of liability coverage, and

"RESOLVED, That any liability insurance requirement which might be imposed upon members of the medical staff shall be by action of the medical staff as a whole and not be a requirement imposed upon it by the governing board; Therefore be it further

"RESOLVED, That this recommendation be distributed to all county medical societies and chiefs of staff in areas where obligatory liability coverage is required.

"Mr. Chairman, I recommend adoption of this substitute resolution."

Motion was carried to adopt the substitute resolution.

Dr. Carson: "Your Committee further suggests a change in Recommendation No. 2, to delete the last two words of this subparagraph which are 'fee levels' and substitute therefor the words 'patient benefits.'

"Mr. Chairman, I move the adoption of this change as recommended by the Reference Committee."

Motion was carried.

Dr. Carson: "On Recommendation No. 3, your Committee recommends acceptance of the recommendations of the Committee on Hospitals and Extended Care Facilities and recommends that paragraph 5 be deleted, which action was concurred in by the chairman of the Council."

Motion was carried.

Dr. Carson: "Mr. Chairman I move the adoption of the acceptance of the Council's report with the already accepted changes."



Reference Committee V consisted of (left to right) Drs. William W. O'Connell, St. Augustine; Rufus K. Broadaway, Miami; Russell B. Carson, Fort Lauderdale (Chairman); John T. Karaphillis, Clearwater, and Laudie E. McHenry Jr., Melbourne. Mrs. Arlene Cassens was recording secretary.

Dr. Jack MaCris, Pinellas: "If you will turn to page 60 in your Handbook, paragraph 3, the wording is a little ambiguous and I want to be sure you know what you are voting on.

"Actually the problem is that Blue Shield has requested approval of a program to apply to national groups and they wish to contract for the insurance policy on a national basis. The basis of payment is 'usual and customary' and we will be asked to participate in such a program. In doing so, several items of importance arise—mainly that this is a no-income ceiling service contract. In other words, regardless of whether it is the president of the company or the lowest employee, all physicians' fees are considered to be paid in full by this program. This is quite a departure from the initial concept of Blue Shield.

"Several things happen when this type contract is written. One, it is obvious that direct billing of the patient is virtually eliminated. It establishes a national fee-payment policy. Again, this would be a ready-made method of payment for the government, saying that the fee schedule is self-imposed and created by the doctors themselves.

"There is very little to be gained on the part of Florida physicians in accepting such a program at the present time. If it proves to be a valuable aid to physicians, it can be accepted at a later time. I think this is an inopportune time to accept such a program."

Dr. Charles R. Sias, Orange: "I move a substitute paragraph for the last sentence of paragraph 3 in the Handbook, beginning 'The Board of Governors recommends. . . .' I would like to strike that sentence and substitute the following paragraph:

"The House of Delegates does not approve of any change in the present service income limits of policies written by Blue Shield of Florida.

"In discussion of this motion, please refer to the Contracts Committee report which we received at the Blue Shield meeting on Thursday."

Dr. Sias read the recommendation of the Contracts Committee of Blue Shield.

"In paragraph 3, page 60, you will note that neither the Committee of Seventeen nor your Council on Medical Economics was able to approve a paid in full, no service income limit contract because of strong divided opinion. There was also a division of opinion in the Board of Governors. For these reasons, I feel that this question must be voted upon by this House of Delegates. The contract being proposed is a nationwide, paid in full, no service income limit contract for federal employees. There will be no co-insurance or deductible provision to limit patient utilization. The patient usually will not realize what his insurance costs and also will not know what his physician is being paid unless direct billing is utilized. Complete prepayment of a full payment contract will remove all of the usual medical insurance safeguards."

Dr. Zellner: "I am chairman of the New Contracts Committee and I certainly understand the concern expressed about paid in full contracts. I also have the onerous job of representing this Association before the Florida Industrial Commission, where we are trying very hard to get just what we are objecting to here—a usual and customary, no service income limit. And right now, we are suing for it. To me, it is the height of inconsistency to say to the Florida Industrial Commission that this is what we want but to tell Blue Shield we don't want it."

Dr. Carson: "I would like to call attention to a somewhat relative resolution 69-9 on which the Reference Committee has made recommendations which in large measure, I believe, will take care of that portion of Recommendation No. 3, page 60, now under discussion."

Dr. Richard C. Clay, Dade: "I am a member of the Committee of Seventeen and the Committee of Seventeen has recommended the adoption of these contracts.

"We have considered the possibility that individuals with high income levels would want to buy this policy if it were offered to individuals, however, this is being offered only to very large groups where you will get a cross-section of the population economically. This is already in effect in this state in a pilot program for U. S. Steel and General Motors. From the standpoint of economics, our actuaries tell us this contract is going to be so expensive that it will have very few takers. The National Association of Blue Shield Plans is not only going to recommend but also require that this policy be written and if we are unable to write it, I am sure these policies will be purchased from commercial carriers."

Dr. Warren W. Quillian, Past President and President of Blue Shield: "The key to this is in the first line 'for making available.' It is probable that the fee for this will be so prohibitive that it will not be very popular. You can rest assured this policy will be written if it is not written by Blue Shield of Florida."

Dr. Yount, Palm Beach: "Do you know what you are voting for? You are voting to have your fee set. Now I can't tell you about this program —I haven't seen it and the rest of you haven't. I am in contact with a lot of people in Texas and they are blessed with this program. Somehow, the usual and customary fee does not seem to come up to what they usually and customarily charge. Here is a receipt from Texas, in which the doctor charged his usual and customary, which I have verified as being usual and customary in that area of $60. They said the usual and customary was $49, they showed a difference of $11 and on the back page of this is an instruction that says, 'any charge in the non-allowed column is not payable by the subscriber.'"

The Speaker called for a vote on Dr. Sias' substitute "The House of Delegates does not approve of any change in the present service income limits of policies written by Blue Shield of Florida."

Dr. Sias' substitute recommendation was defeated.

The Speaker called for a vote on the recommendation of the Reference Committee to approve the Council's report as amended.

Motion carried.

Council Report

JACK A. MACRIS, *Chairman*

The Council met on two occasions during the year at which time committee activities and recommendations were acted upon and subsequently presented for consideration to the Board of Governors.

At the time of the March 23, 1969 meeting, the Council reviewed annual committee reports with the resulting recommendations.

I. The report of the Committee on Relative Value Studies was approved with the following recommendation:

That members of the Association be urged to cooperate and work with the RVS project activities intended to update the RVS manual.

II. The report of the Committee on Health Insurance was approved with two additional recommendations:

a. **The Council, in recognizing the benefits of the Individual Responsibility Program and that it has had good acceptance by those physicians using it, recommends that this matter again be called to the attention of the county medical societies with the offer to make available informed speakers to explain the principles and details of the program.**

b. **The Council further recognizes that there is a need for revision of the IRP form and recommends that the Committee on Individual Responsibility Program proceed with preparation of a revised form.**

III. The annual report of the Committee on Members Insurance was approved with the addition of the following comment and recommendation:

RESOLVED, That all hospitals delete from their requirement for staff privileges the necessity to disclose the limits of liability coverage, and

RESOLVED, That any liability insurance requirement which might be imposed upon members of the medical staff shall be by action of the medical staff as a whole and not be a requirement imposed upon it by the governing board; Therefore, be it further

RESOLVED, That this recommendation be distributed to all county medical societies and chiefs of staff in areas where obligatory liability coverage is required.

IV. The report of the Committee on Hospitals and Extended Care Facilities was approved as presented.

V. The annual report of the Committee on Advisory to Blue Shield and Fiscal Intermediaries was approved with the additional comment and recommendation.

The proposal for making available a "usual and customary" contract was discussed at length at two previous committee and council meetings with strong feelings expressed, and because of the divided opinion, the Council is unable to reach a decision of approval or disapproval and urges that the matter be presented for consideration by the Board of Governors and the full House of Delegates. (The Board of Governors recommends that Blue Shield of Florida, Inc. adopt a usual and customary fee, all physicians service contract.)

Other Items:

A. An AMA proposal regarding an incentive reimbursement program in Escambia County was considered. The Council is of the opinion that approval by the Escambia County Medical Society, local hospitals in the Pensacola area and other providers of professional services should be obtained.

B. Two resolutions presented by the Florida Academy of General Practice, one dealing with the arbitrary $10 fee for house calls and the other with reference to injections of vitamins, were considered. It was recommended that no action should be taken and that additional detailed information be obtained for use by the Council chairman in presenting the matter to the Board of Governors.

Committees:

Committee on Advisory to Blue Shield and Fiscal Intermediaries: The Committee on Advisory to Blue Shield and Fiscal Intermediaries met in Jacksonville on September 15, 1968 and again February 2, 1969 in Orlando, Florida. At that time the following items were discussed with the recommendations as outlined.

Title XIX Implementation—A presentation was received from Dr. Phillip Hampton on Title XIX implementation in Florida with specific reference to extent of proposed benefits and estimated cost of implementation. Reference was also made to the action of the FMA Ad Hoc Committee for Implementation of Title XIX. This information was received and no action was taken.

State Employees Health and Welfare Program—The Blue Shield sales staff, headed by Mr. Tom Stalsworth, presented a summary report regarding a proposed state hospital, health, and life insurance program under consideration by the Florida Legislature. This program would provide for a life and health insurance program for some 60,000 state employees and would be enrolled through one group program awarded on a competitive bid basis.

Recommendation:

Resolved that the Committee on Advisory to Blue Shield and Fiscal Intermediaries will strongly support Blue Shield in its efforts to obtain a contract for state employees.

Usual and Customary Charges—During both meetings the subject of determination of usual customary fees by Blue Shield as the Medicare carrier for the State of Florida was discussed. The action of the FMA House of Delegates in increasing the number of districts in which the usual and customary fees were to be determined was discussed, found to have been implemented by Blue Shield and in a continuing development phase. The method for determination of usual and customary fees in other contracts was discussed. The proposed federal employee country-wide Blue Shield contract was discussed in length.

Recommendation:

Resolved to recommend to the Board of Governors a reaffirmation of FMA policy by adoption of the current AMA resolution defining "usual," "customary" and "reasonable."

Concurrent Care—Concurrent care as provided by certain Blue Shield contracts was discussed and the lack of knowledge of many physicians of Blue Shield's interpretation of policy provisions was noted.

Recommendation:

Resolved that in order to alleviate ill will, Blue Shield will be requested to send an informative letter to physicians advising them how to word their letters requesting fees for concurrent care.

Provisions for Medical Emergencies—The lack of provisions for many of the Blue Shield contracts covering medical emergencies that could be treated in a hospital emergency room was discussed.

Recommendation:

Resolved that a recommendation to the Blue Shield board would be made to consider the inclusion of certain medical emergencies requiring emergency room treatment in the various Blue Shield contracts.

Contract Coverage for Professional Fees—The Committee's attention was called to situations where one or more physicians were involved in providing professional services, and in some instances the entire contract benefits were paid to one physician while other attending physicians were not paid.

Recommendation:

Resolved that a recommendation be made to the Blue Shield board that all letters to patients concerning benefits, where applicable, should state that the fee paid was the maximum allowable under the individual contract.

Medicare Part B Reasonable Charges—Recent correspondence from the Social Security Administration concerning the statistical method to be used for determination of the prevailing level of fees for Medicare Part B was presented. The Blue Shield staff pointed out that they were currently using the ninetieth percentile of charges as determined by computer study but the Department of Health, Education, and Welfare had instructed all carriers to use the statistical method known as the Mean plus 1 standard deviation as determination of the prevailing level for fee determination.

Recommendation:

Resolved that the FMA continue in its confidence in Florida Blue Shield to provide a fair and equitable means of determining usual and customary fees and concur with Florida Blue Shield that no change should be made at the present time because:

1. A change of standard in so brief a time as six months would shake physicians' confidence in the Medicare program and would thereby adversely affect the beneficiaries in Florida.

2. The change now would unnecessarily delay the institution of computer determined customary charges.

3. Until such time as the logic of using the Mean plus 1 standard deviation is supported by valid and convincing data it will be a practical impossibility to convince physicians and others that this standard is not simply a method of reducing patient benefits.

Recommendation:

Resolved that the FMA instruct the Blue Shield Board to continue to negotiate with the federal government using the ninetieth percentile determination.

Utilization Review—The Blue Shield representatives presented the current planning of establishment of Utilization Review Committees and the Social Security Administration's interest in having carriers perform more uniformly in the administration of the Medicare program. A "flow chart" indicating the method recommended for reviewing the problems arising out of over-utilization was presented. The problem of a small list of physicians who had received more than $70,000 during the first 18 months of the Part B program was discussed.

I would like to thank the entire Committee membership for their interest and cooperation in making this Committee's action a success. The Blue Shield Board representatives who work with this Committee, Mr. Joe Stansell, Mr. George Lewis, and others, are to be complimented for their clear and concise presentation of the Blue Shield matters. We are also greatly indebted to Mr. Al James, our FMA staff representative, who has contributed much to our Committee's successful operation.

Committee on Health Insurance—During the year, representatives of the Committee on Health Insurance met with representatives of the Florida Health Insurance Council and members of the FMA Individual Responsibility Program Committee. Indications are that local insurance review committees currently in existence are operating as intended and without significant difficulty in reviewing claims submitted by health insurance companies and individual physicians. A survey letter was directed to the presidents and secretaries of county medical societies to determine whether or not the societies have in existence and functioning an insurance review committee. The inquiry requested the names of the physicians serving as chairmen and also solicited their summary comments as to the local committees' activities or any problems experienced.

As reported to the Council on Medical Economics, the state level committee is primarily responsible for assisting local committees in problem cases if so requested or circumstances warrant advice.

Assistance by individual members of the state committee is available to local committees.

At the time of the joint meeting with the IRP Committee, it was agreed that another meeting be held at the appropriate time by the IRP Committee and the Committee on Health Insurance for the purpose of discussing eventual transition of the IRP program to the Committee on Health Insurance.

Recommendation:

That it be recommended that the purpose and goals of insurance review committees, as established by the Committee on Health Insurance, be reaffirmed and called to the attention of county medical societies with the offer to be of assistance upon request.

Committee on Hospitals and Extended Care Facilities—The chairman attended meetings in Jacksonville, Orlando and Lakeland as representative of the Florida Medical Association for meetings concerning the Florida Hospital Association, Florida Association of Nursing Homes and Extended Care Facilities and Teaching Seminar on Hospital Infections. In addition, the chairman attended meetings with Dr. Lawson Hardy, Medical Director for Aetna Insurance Company, carrier for Florida Extended Care Facilities under Medicare; disseminated information concerning patients eligible for Medicare benefits versus domiciliary care patients not eligible for sucb benefits to the physicians of the Florida Medical Association, and worked out closer liaison with nursing home and extended care facility autborities regarding these matters. The Committee on Hospitals and Extended Care Facilities worked hard during the year for inclusion of physicians on hospital governing boards as members of the board of governors and carried this matter not only state-wide but to the meeting of Joint Commission on Accreditation in February in Chicago as state representative where this matter has been strongly urged for adoption in tbe new two-volume set on Standards of Accreditation.

Recommendation:

1. Strongly urged continued support for one or more physicians on all hospital governing boards, and if possible, on extended care and nursing home facility boards.

2. Urged the continued support and participation of physicians in the formation and operation of health planning councils at the community and county level. This is imperative for physicians to have a continued voice in the planning and operation of hospitals and related facilities. If physicians are to continue to have voice in medical matters, we must reassume a paramount position in regard to treatment facilities.

3. We must take note of the tendency on the part of the federal government to obtain control of hospitals through grants and federal support. In this area the increased tendency to shift funds from inpatient to outpatient services has been noted in the past year. Since federal policy would seem to concentrate all health treatment facilities (both inpatient and outpatient) in the hospital medical center, the need for physician representation is further emphasized.

4. Recommend the president of all hospital staffs serve as an ex-officio member of all governing boards (this in addition to one or more physicians who are actually elected or appointed to the governing boards of hospitals).

5. Not approved.

6. It is urged that all hospitals continue to offer adequate emergency room facilities and deemphasize the routine non-emergent outpatient care services now being offered in many emergency room facilities. Control of these patients should be centered in physician offices and not in emergency room facilities.

Committee on Members Insurance—During this year, our liability insurance premiums have increased greatly and in one county (Dade) this increase amounted to about 300% in the case of one ortbopedic surgeon's premiums. Because of the high payout of liability claims, it has been necessary to place this county in a special category charging higher premiums. Comparison of Medical Professional Malpractice premiums at $100/$300 limits are as follows:

Miami, Florida FMA Program	Fla. Bureau	New York City New York Bureau
Physicians — 241.00	285.00	422.00
Physicians — 423.00	500.00	738.00
Specialists — 1,203.00	1,425.00	2,533.00

Tbe above comparison indicates that our FMA program is considerably better than the Bureau plan and on the average Dade County premium charges represent approximately 50% of the premium charges for comparable classes in New York City.

Only a few insurance companies still write liability insurance for the state of Florida.

Because of the desirability of carrying liability insurance when in active practice and its increasing premium costs, your committee would welcome any ideas as to the method of reducing claims against our members and thus reducing our premiums. Along this line of thinking, we bave already suggested to our representative that special rates be given those members who agree to go to trial in all cases, unless an exception is made by an appropriate committee of doctors and attorneys, with no settlement out of court permitted. Furthermore, sbould the case be won, an automatic countersuit must be brought against the plaintiff. The Medical Defense Fund could be used to defray expenses. It is our thinking tbat tbis would materially reduce the number of suits brought against our members. Of course, also, we should always bear in mind that the number one prevention of suits lies in our hands by abstaining from loose talk concerning our conferrers' treatment. We would like to have the Council's opinion also implementing this plan.

We further would like to recommend tbat a resolution be passed requesting all hospitals to delete from tbeir requirement for staff privileges liability coverage. Some men, often times through no fault of tbeir own, are unable to get more than $100,000 and $300,000 coverage and their yearly premium is running in the neighborhood of $8,000. We furtber would like to recommend to the Council that all medical societies and cbiefs of staff be notified of your opinion concerning this obligatory liability coverage.

This committee wishes to approve the Medical Defense Fund's use for defraying all or part of the legal expenses for our members who are bringing suit to protect their good names. Also, this fund, as stated above, could be used in countersuits.

One of the most important functions and activities of the committee is to meet and consult with FMA staff, executives of Marsb & McLennan, Inc. and Employers' Insurance Company to offer counsel and advice regarding problem situations involving individual members. During the past year, several problem cases were reviewed with the assistance of individual committee members, and with the exception of one occurrence, each matter was resolved to the best possible benefit of each physician.

Committee on Relative Value Studies—Tbe 1968 House of Delegates approved a recommendation of the Committee on Relative Value Studies for careful development of adequate continuing surveys and revision of the 1968 Florida RVS manual, using paid professional assistance, if necessary. This resulted from a conviction that further relative value manuals sbould be based on accurate study and knowledge of the free patterns of Florida physicians, whicb could only be accomplished with professional statistical assistance.

Accordingly, throughout tbe summer of 1968, investigations of Florida and out-of-state research and actuarial groups with the capability for this project were made. At

a meeting of the RVS Committee on October 13, Dr. William M. Howard, an actuary and Professor of Finance and Insurance at the University of Florida, who also heads a private research statistical firm, was interviewed, appeared qualified to conduct this study, and was invited to submit a proposal. A phased project, each phase to be evaluated and approved before the next could be undertaken, was proposed and approved by the Board of Governors on January 12, 1968.

Dr. Howard is currently engaged in Phase I, the planning phase, and is developing survey and computer techniques. It is anticipated that Phase I may be completed in May 1969, and the entire project in one year or slightly longer. Conferences and subcommittee meetings have been held with Dr. Howard to provide necessary orientation and information, and further meetings are planned throughout the year as the need for advice and reviews develops.

It is anticipated that this work will give FMA for the first time a Relative Value manual based entirely on Florida fees. This very authoritative study should be of significant benefit as a guide to physicians and in dealing with third party groups paying for medical care. These studies, it is planned, will also develop methods for continuing revision of the RV manuals.

Aside from this project which will extend through 1969-70, committee activity has been minimal. Spot revisions of relativity in the 1968 Manual have been postponed pending Dr. Howard's projected surveys which should cover areas of suggested revision.

Board of Governors Actions

Dr. Carson: "Board Action No. 2, Workmen's Compensation, will be referred to later under consideration of various resolutions.

"Board Action No. 3, Relative Value Studies; Board Action No. 14, HEW; Board Action No. 15, Blue Shield and Board Action No. 18, Hospital Boards, were approved as presented and your Committee recommends the adoption of these reports of the Board of Governors." (See Board of Governors Report, page 512)

Motion carried.

Dr. Carson: "Board Action No. 7, Medicare, your Committee accepts the first sentence of this report relative to peer utilization and review of Medicare claims.

"Mr. Chairman, the Committee recommends adoption of the first sentence of this report."

Motion carried.

Dr. Carson: "Beginning with the second sentence of the report, your Committee considered the serious implications contained therein and rejects that portion of the report. Before calling for the vote, it is the feeling that the submission of information of this importance to Social Security is not entirely an 'internal matter' of Blue Shield, but that it constitutes a grave encroachment on the privileges of physicians of the Florida Medical Association. Your Committee feels that as long as Blue Shield acts as a fiscal agent in the handling of Medicare and similar government programs, they should resist all attempts by Social Security and similar government agencies to obtain the disclosure of information which might be considered a contractual relationship between individual physicians and the fiscal agent, Blue Shield.

"Mr. Chairman, we now submit this philosophy and recommendation to the House for their favorable consideration but recommend rejection of the second sentence of the report."

(See Board of Governors report, page 512)

Motion carried.

Resolution 69-1

Dr. Carson: "Resolution 69-1, Definite Fee Arrangement for Attorneys, by Leon-Wakulla-Jefferson County Medical Society; your Committee recommends adoption of this resolution and strongly recommends that the suggestions included in the resolution be carried out with dispatch."

Motion carried.

Definite Fee Arrangement for Attorneys Leon-Wakulla-Jefferson County Medical Society

Whereas, Ethical lawyers should not institute malpractice cases against physicians or other professions that are legally without merit, and

Whereas, Suits for malpractice cases are frequently handled on the basis of a contingent fee which may permit such suits without merit, to be instituted, and

Whereas, Disposition of such malpractice cases, even under the jury system as the constitutional procedure, in many cases present questions highly technical and difficult for the normal juror to contemplate in determining the merits of the controversy and in arriving at a just verdict, and

Whereas, Although all meritorious claims should be instituted, an effort should be made to reduce the increasing number of suits based on claims that are without merit, and

Whereas, The medical profession has abandoned a sliding fee schedule for treatment of patients and has a usual and customary fee for all procedures; therefore, be it

RESOLVED, That the Florida Medical Association's liaison committee meets with a similar committee of the Florida Bar Association to discuss the possibility of a definite fee arrangement rather than a contingent fee basis and, be it further

RESOLVED, That the Florida delegates to the American Medical Association present this resolution for similar action by that Association with the American Bar Association.

Board of Governors Action No. 2 Resolution 69-3

Dr. Carson: "Your Committee has considered the two resolutions and the Board Action having to do with Workmen's Compensation. We feel at this time the action called for in Resolution 69-3 is being implemented."

Dr. Carson quoted the Board of Governors action No. 2.

"It is our understanding that the Florida Medical Association's legal counsel has instituted action by a petition filed with the Florida Industrial Commission which requests that they comply with the Florida Statutes calling for the payment of just and proper fees; therefore, we recommend acceptance of the action of the Board as previously stated.

"Mr. Chairman, your Reference Committee recommends concurrence in adopting Resolution 69-3 and Board Action No. 2." (See Board of Governors report, page 512)

Motion carried.

Resolution 69-3

Workmen's Compensation
Broward County Medical Association

Whereas, There is an absolute need to develop an acceptable method for payments to physicians for their professional services in Workmen's Compensation cases, and

Whereas, From the inception of negotiations between the Florida Industrial Commission and the Florida Medical Association, the physicians of Florida have cooperated fully and acted in good faith, and it is now evident such actions are neither appreciated nor reciprocated, and

Whereas, Resolves and determinations to accept no voluntary patients under Workmen's Compensation are futile, and in no way resolve the basic problem, and

Whereas, The Board of Governors of the Florida Medical Association through a Special Committee has explored all administrative channels, and exhausted all available avenues of negotiation, it is, therefore

RESOLVED, That the House of Delegates recognize the efforts of the Board of Governors and the Special Committee by official affirmation, and further

RESOLVED, To proceed to execute the previous determination to institute proceedings for relief through the courts.

Resolution 69-19

Dr. Carson: "Awaiting conclusion of this petition and possible suit which has been authorized, your Committee suggests the following substitution for the 'Resolved' of this Resolution:

" 'RESOLVED, That the individual physicians of Florida retain the right to either accept or reject a compensation case, and it is recommended that whenever a physician, having treated the Workmen's Compensation case, finds that his usual and customary fee has been reduced by order of the Industrial Commission, that he accept such payment only under written protest of such a reduction of the fee.'

"Mr. Chairman, I recommend the adoption of this substitute 'Resolved' in Resolution 69-19."

Dr. Joseph Matthews moved to delete the word 'only' from the "Resolved."

Motion carried.

Motion carried as amended.

Workmen's Compensation
Escambia County Medical Society

Whereas, The Escambia County Medical Society supports the Florida Medical Association in its petition to the Florida Industrial Commission for an equitable system of payment for medical services; therefore be it

RESOLVED, That the individual physicians of Florida retain the right to either accept or reject a compensation case, and it is recommended that whenever a physician, having treated the Workmen's Compensation case, finds that his usual and customary fee has been reduced by order of the Industrial Commission, that he accept such payment under written protest of such a reduction of the fee.

Resolution 69-6

Dr. Carson: "We concur in the ideals presented in this resolution and recommend its adoption and referral to the Board of Governors for implementation."

Motion carried.

Physician Participation in Planning for and Provision of Health Care Facilities
Charlotte County Medical Society

Whereas, All authorities in the fields of health care and planning for health and medical care are agreed:

1. That there is a shortage of facilities for health and medical care;

2. That there is a need to halt the spiral in costs of health care which has become acute—particularly in the hospitals;

3. That the medical profession bears a pressing responsibility to participate in the planning for and provision of health care facilities to meet the public need;

4. That the medical profession should become involved in the planning for and provision of such health care facilities—indeed, that it must do so if success is to be achieved in these areas;

RESOLVED, That physicians lend their talents to curb the costs of medical care by active participation on the boards of directors and boards of trustees of hospitals in the communities wherein they practice and reside;

RESOLVED, That the Florida Medical Association House of Delegates does endorse and urge such active participation and also the active participation of its members in the planning for and provision of health care facilities of all types as indicated by the public need and specifically in the following areas: (a) Acute care hospitals; (b) Emergency medical facilities; (c) Extended care facilities; (d) Mass screening and preventive medicine programs; (e) Nursing homes; (f) Office and clinic facilities.

Resolution 69-9

Blue Shield Payment Schedules as Percentage of Usual and Customary Fees
(Not Approved)

Dr. Carson: "Your Committee listened to considerable discussion of this resolution and duly considered its intent and beneficial suggestions; however, your Committee must point out that at the present time Florida Medical Association has not authorized Blue Shield to write usual and customary fee programs for the non-government

subscribers except on one small pilot program. We would, therefore, urge Blue Shield to further experiment and expand as rapidly as feasible this experiment toward the writing of usual and customary programs for their other policies.

"Mr. Chairman, your Committee recommends rejection of the resolution as presented for the reasons stated above, but we recommend adoption of the suggestions of the Reference Committee and that they be accepted as a substitution for the resolution as presented."

Dr. J. Gerard Converse, Polk: "I believe the intent of this resolution, although it was poorly worded, has been missed by the Reference Committee. The title to this resolution might have been called, 'Truth in Advertising.'

"The basic reason behind this resolution is that the subscriber does not always understand that Blue Shield does not pay the full physician's fee. It does not seem impossible to me that the House of Delegates approve the philosophy of Blue Shield selling all their policies as a percentage of usual and customary. In other words, if it is a miserable policy, tell the subscriber that it pays a miserable percentage of the usual and customary fee."

Motion carried to approve the recommendation of the Reference Committee 101 to 51.

Resolution 69-11

Dr. Carson: "Your Committee approves this resolution and compliments Blue Shield for its services to the physicians of Florida during the past year.

"Mr. Chairman, your committee recommends adoption of this resolution."

Motion carried.

Blue Shield of Florida, Inc.
Duval County Medical Society

Whereas, The Duval County Medical Society is aware that Blue Shield of Florida, Inc. desires, and has the opportunity, to furnisb adequate benefits in providing the finest type of voluntary health insurance protection for the citizens of Florida, and

Wbereas, Blue Shield bas gained widespread public acceptance; and bas become involved in governmental medical programs at the request of organized medicine. We believe that private medicine can provide the flexibility and innovations so necessary to produce tbe higbest quality of medical care under these circumstances.

RESOLVED, That the Duval County Medical Society recommends to the Florida Medical Association that Blue Shield of Florida, Inc. be assured of the support and cooperation of the individual participating physicians comprising the membership of tbe various county medical societies in efforts to improve the services and benefits of the Blue Sbield Plan and program.

RESOLVED, That this Resolution be submitted to the Annual Session of the House of Delegates of the Florida Medical Association at Miami Beach, in May 1969, for approval.

Resolution 69-12

Dr. Carson: "Your Committee recommends approval with the deletion of the fifth 'Whereas,' which paragraph your Committee considered to be restrictive and noncontributory to the purpose of the resolution."

Motion carried.

Insured Ambulatory Diagnostic Benefits
Duval County Medical Society

Whereas, Medical diagnosis is an integral part of the practice of medicine and diagnostic services are physicians' services, and

Whereas, Tbe provision of so called "pre-admission testing" by Blue Cross Plans involves provision of diagnostic medical services to ambulatory patients, and

Whereas, Provision of pre-admission testing under bospital care insurance limits the site of service to the hospital and payment for this service to the bospital, and

Whereas, These restrictions inhibit attending physician in selecting where and to whom to refer patients for these medical services, and

Whereas, The insurance of medical benefits is the purpose of Blue Shield Plans and commercial medical care insurers, and

Whereas, Provision of insured ambulatory diagnosis benefits eliminates some medically unnecessary occupancy of hospital beds, and

Where, Ambulatory diagnostic benefits are desired by patients, have been recommended by spokesmen for government, labor and management, and will be made available through pre-payment, therefore, be it

RESOLVED, Tbat the House of Delegates of the Florida Medical Association requests and urges Blue Shield Plans and other insurers of physicians services in Florida to aggressively extend provision of ambulatory benefits to those insured, and

RESOLVED, That the Florida Medical Association notes that provision of ambulatory diagnostic benefits by Blue Cross and insurers of hospitalization restricts patients and physicians in freely selecting where tbese medical services will be accomplished and by whom.

Assigned to: Reference Committee No. V

Resolution 69-14

Dr. Carson: "Your Committee recommends approval of this resolution as a reiteration of policy and we urge that all members of the Florida Medical Association become active participants in attempting to combat this tendency."

Motion carried.

Lay Domination of the Medical Profession
St. John's County Medical Society

Whereas, Certain hospital boards and certain hospital administrators have attempted to assign to themselves the medical staff function of the delineation of privileges permitted individual members of the medical staff, and

Whereas, Such abrogation of normal medical staff rights constitutes an invasion of the medical field by unqualified lay individuals, and

Whereas, Such action denies to the individual physician the right of being judged by his peers, and

Whereas, This compulsory subjugation of our profession by lay persons would serve as a stepping stone to complete control and regulation of physicians by a lay federal bureaucracy; therefore be it

RESOLVED, That the House of Delegates of the Florida Medical Association urges all members of the Florida

Medical Association to combat actively by any means required any such move by the hospitals on whose staffs they serve.

Resolution 69-15

Dr. Carson: "Your Committee spent considerable time in consideration of this resolution on 'Fee for Service,' and feels that the following modifications of the resolution are desirable.

"1. Deletion of the first 'Whereas' of the resolution.

"2. Deletion of the words, 'That the policy of the St. John's County Medical Society shall be a statement of principle,' in the first line of the first 'Resolved,' and substitute, 'That the Florida Medical Association recognizes.'

"3. That the second and third 'Resolveds' shall be changed to read:

"RESOLVED, That in the event society sees fit to grant medical aid to certain of its less affluent members, such aid should be in a form so that the individual may reimburse the physician of his choice for the services required, and be it also

"RESOLVED, That the Florida Medical Association request its delegates to submit this resolution to the American Medical Association.

"Mr. Chairman, we recommend the adoption of the resolution as modified by the Committee."

Motion carried.

Fee for Service
St. John's County Medical Society

Whereas, Recent developments in programs of aid to individual citizens have made it mandatory that organized medicine adopt a unified attitude and policy towards this question; now therefore be it

RESOLVED, That the Florida Medical Association recognizes that medical care in a free society should be regarded as a service to be sought by the recipient, and that the professional efforts of the physician in private practice shall not be confiscated for distribution as a public utility, and be it also

RESOLVED, That in the event society sees fit to grant medical aid to certain of its less affluent members, such aid should be in a form so that the individual may reimburse the physician of his choice for the services required, and be it also

RESOLVED, That the Florida Medical Association request its delegates to submit this resolution to the American Medical Association.

Resolution 69-30

Dr. Carson: "Your Committee recommends adding to the first 'Resolved' in line 2 after 'individual physicians' the following: 'or a group in which each member is a licensed physician,' making this read:

"RESOLVED, That the House of of Delegates of the Florida Medical Association instruct Florida Blue Shield to issue Blue Shield numbers only to licensed individual physicians or a group in which each member is a licensed physician and that payments be made only to licensed physicians or groups in which each member is a licensed physician.

"Your Committee further recommends adding to the second 'Resolved' after 'physician' the words, 'or any member of a group,' and after the word 'personally' the words, 'or the members of the group collectively,' making this read:

"RESOLVED, That steps be taken to provide that when a physician or any member of a group endorses a Blue Shield claim, he certifies that he personally, or the members of the group collectively, provided the care for which the claim is made.

"Mr. Chairman, we recommend adoption of this portion of the report."

Dr. Harold W. Johnston, Orange: "The idea of allowing a group to have a number would simplify the bookkeeping, but I am against this idea. The disadvantages would be to obscure the over-utilization by a member of the group."

Dr. Charles F. Tate Jr., Dade: "There was a lot of discussion on this resolution. We think the tremendous cost involved in trying to handle multiple numbers in a group is unjustified. I speak in favor of the amendment as recommended. Some groups figured it would cost them as much as four or five thousand dollars a year. We are trying to keep the cost as low as possible, so as to keep down the cost to the patient. This is too restrictive, and the problem can be handled another way. The new regulations from HEW will make this unnecessary."

Dr. Shocket, Dade: "I speak in favor of the modified resolution from the Committee, because when Medicare funds became available for out-patient care in one of our large hospitals in Dade County the administration was tempted to collect those fees for its own coffers. Only by forming an out-patient group and getting a single Medicare number, which facilitates our bookkeeping for 150 to 200 physicians, can we fight the threat of big hospitals. I urge support of the amended resolution."

Motion was carried to approve the Reference Committee recommendation.

Blue Shield Numbers
Dade County Medical Association

Whereas, Physicians agree as individuals to participate or not participate in Blue Shield, and

Whereas, The issuance of Blue Shield numbers to organizations or groups may foster practices which are contrary to the Principles of Medical Ethics, laws of the State of Florida and rules of the State Board of Medical Examiners; now, therefore, be it

RESOLVED, That the House of Delegates of the Florida Medical Association instruct Florida Blue Shield to issue Blue Shield numbers only to licensed individual physicians or a group in which each member is a licensed physician and that payments be made only to licensed physicians or groups in which each member is a licensed physician, and

RESOLVED, That steps be taken to provide that when a physician or any member of a group endorses a Blue Shield claim, he certifies that he personally, or the members of the group collectively, provided the care for which the claim is made.

Dr. Carson: "We recommend the adoption of the report as a whole with the changes which have been made by the actions of the House previously taken."

Motion carried.

Dr. Carson: "We, the members of this Committee, wish to express our sincere appreciation to the large audience who contributed materially to the information of the Committee with their liberal, informative and orderly discussions, and we also desire to especially thank our untiring and efficient secretary, Mrs. Arlene Cassens. This report was submitted by William W. O'Connell, Laudie E. McHenry Jr., John T. Karaphillis, Rufus K. Broadaway and Chairman, Russell B. Carson."

Election of Officers

The Vice Speaker announced that nominations for President-Elect were the next order of business and that speeches would be limited to two minutes.

Dr. Burns A. Dobbins Jr., Broward: "Speaking for the delegation and the entire membership of the Broward County Medical Association, I nominate Russell B. Carson for President-Elect of the Florida Medical Association. We haven't had a member for this office since the late Dr. Leigh Robinson thirty years ago. We believe Russell Carson has the qualifications and the experience for this job. With the two minute rule in effect, I won't go into all of his background, but you have it in your packets.

"In Broward, we know Russ is a 'doer' and not a talker. When we have a difficult job to do, we ask Russ to do it. Our members—all of them—know how important to our main blood stream are those little RBC's. We, in Broward, want to send you a big RBC for the office of President-Elect."

Dr. Edward W. Cullipher, Dade: "I represent the most important segment of this society—the rugged individualist—myself. I want to second this nomination of Russ Carson. You have seen this long history of Russell and his accomplishments and I think it fitting you should know this now, because it would take a hell of a big tombstone to put all that on.

"Even in his own town, Russ is known as industrious, fair, honest—in fact, that's what they all say about him—he is fairly honest. After all the work he has done for our organization, I think it is only fair that we show proper recognition by making him our President. He will then have completed all the jobs in our Association."

Dr. Carson's nomination was also seconded by Dr. Samuel M. Day of Duval and Dr. Miles Thomley of Orange.

Dr. William F. Brunner of Jackson-Calhoun asked to yield the floor for the next nomination to the delegate from Hillsborough.

Dr. John C. Fletcher, Hillsborough: "It is with great pleasure that I rise to nominate James T. Cook of Marianna for the office of President-Elect of the Florida Medical Association.

"Dr. Cook is a unique candidate who has served ably in all three branches of Florida Medical government—judicial, legislative and executive. He has been a member of the Committee on Membership and Discipline, a member of the Judicial Council; Dr. Cook has served long and well as a delegate in our House of Delegates, later as Vice Speaker, and now serves as our able Speaker during this very complex session. He has demonstrated exceptional executive ability as a member of the Board of Governors. Dr. Cook possesses an humble but proud family heritage which continues in the impending graduation of his son from Emory University School of Medicine. Jim Cook has been a civic and community leader; his medical practice contributions have been recognized nationally by his appointment in 1960 as AMA General Practitioner of the Year. Recognizing these and many other qualities, I feel he will be an effective, articulate and informed leader who will represent the best that is inherent in Florida and American Medicine."

Dr. Brunner, Jackson-Calhoun: "I would like to rise as first second to this nomination of James T. Cook of Marianna. I would like to add one thing that is not included in this brochure in your packet, and this is the fact that I practice with this man daily. I know him to be entirely ethical, moral and an all round good doctor."



President-Elect James T. Cook of Marianna (right) is escorted to rostrum by Drs. William F. Brunner, Marianna (left center) and William W. Thompson, Fort Walton Beach (far left).

The nomination of Dr. Cook was also seconded by Drs. Charles R. Sias of Orange; Nelson H. Kraeft of Leon-Wakulla-Jefferson; Arthur W. Wood Jr. of Dade; Thomas M. Edwards, Duval; and William M. C. Wilhoit, Escambia.

Nominations were closed and Dr. James T. Cook was elected by secret ballot.

Dr. William W. Thompson and Dr. William F. Brunner escorted Dr. Cook to the rostrum.

Dr. Cook: "Thank you, gentlemen. I think I am just plain scared. I can't talk about my ability—I don't know whether I have much or not. Certainly I have some intelligence, but not the greatest in this House. But, if hard work will make a good President, you've certainly got one. I thank you."

The President-Elect then recognized his wife, Mrs. Cook, James T. Cook Jr. and his wife, Nancy.

The following delegates and alternates to the American Medical Association House of Delegates were elected for two-year terms, beginning January 1, 1970 and expiring December 31, 1971:

Delegate—Robert E. Zellner, Orlando
Alternate—Ralph Jack, Miami
Delegate—Burns A. Dobbins Jr., Fort Lauderdale
Alternate—Eugene G. Peek Jr., Ocala

The Speaker announced there were no reports from the fishing, golf or tennis tournaments, so the prizes could not be awarded.

Dr. Wilbur Sumner, Duval: "Mr. Speaker, I don't think this organization could have a finer Secretary-Treasurer than Dr. Floyd Hurt, and it is with pleasure that Duval County presents his name for re-election to the office of Secretary-Treasurer."

Motion carried that nominations be closed and a unanimous ballot be cast for Dr. Floyd Hurt.

Members of the Committee on Membership and Discipline were elected as follows:

District 1—Earl Wolf, Pensacola
District 5—Theodore J. Kaminski, Melbourne
District 6—Henry L. Wright, Tampa
District 8—Jack MaCris, St. Petersburg
District 10—Robert J. Brennan, Fort Lauderdale
District 12—Richard M. Fleming, Miami

Dr. William C. Roberts, Bay: "Mr. Speaker, Mr. President, Mr. President-Elect: The number two man in this organization needs to be a good one. In this age of trial and tribulation, strife and confusion and approaching chaos, we need an expediter. An expediter is a man who can compound confusion and commotion and come up with an intelligent answer. I have just that man. This man has youth, vigor and stature mentally and physically to be our Vice President. I need not go into all of his accomplishments, but I offer to you most enthusiastically Big Bill Thompson from Fort Walton Beach."

Dr. Irving E. Hall Jr., Manatee: "I nominate Dr. Carl Reilly for the office of Vice President. We feel the choice would be good for the organization, but further than that, you have seen a vigorous man present to you today a problem to which we have applied ourselves and I think we will help solve it.

"I have seen him work on a number of different problems and his analytical mind and doggedness are qualities that are hard to find. He is a Diplomate of the American Board of Radiology; he has been a member of the FMA since 1956; he graduated from the University of Illinois in 1945; he has been a delegate from Charlotte County for nine years. He was co-author of our Individual Responsibility Program and has been the moving force in that program. Those of you who voted three to one for the Cohen fight in this

body—this is the man who led it, organized it and put it together for us. I recommend to you for Vice President, Dr. Carl N. Reilly of Charlotte County."

Dr. Rolls of Sarasota, speaking for the Sarasota delegation, seconded the nomination, as did Dr. Vernon Astler of Palm Beach County.

Dr. Rufus K. Broadaway, Dade: "You have been told of his qualifications; the Dade County delegation feels the honor is due him; therefore, I should like to submit the name of Dr. Russell B. Carson for Vice President."

The Speaker, Dr. Cook, took the Chair.

While the vote was being counted, the Speaker asked for nominations for Speaker of the House.

Dr. Rowland Wood, Pinellas: "My candidate for Speaker of the House is well known, both on state levels and the national level in the field of Internal Medicine. He has served you as Vice Speaker for the past two years. In case you have any misgivings about electing an internist as Speaker, I feel he has certain qualifications that are compatible with all the specialties:

"Like the anesthesiologist, he is alert.
"Like the surgeon, he is keen.
"Like the general practitioner, he is available.
"Like the psychiatrist—well adjusted?
"Like the radiotherapist, optimistic.
"Like the proctologist, uncanny, and
"Like the gastroenterologist, he believes in movement.

"On behalf of the Pinellas County Medical Society, I nominate for Speaker of the House, Charles K. Donegan."

Dr. Thad Moseley, Duval: "I rise to call to the attention of this House, qualifications that haven't been mentioned. Charlie has served as a member of the Scientific Council, has served on the Scientific Work Committee, and as Associate Editor of your Journal. Even as a surgeon, I wholeheartedly endorse the nomination of Dr. Donegan."

Motion was carried that nominations be closed and Dr. Donegan elected unanimously.

Dr. William M. Straight, Dade: "The Dade County delegation wishes to place the name of Dr. Franklin J. Evans in nominatiton for Vice Speaker of the House of Delegates. Fred Evans is both a physician and an attorney. He has served as president of our county medical society, president of the Florida Academy of General Practice and has rendered distinguished service to this House as Speaker in 1965 to 1967. Because of Dr. Evans' special talents and experience, the Dade delegation has prevailed upon Dr. Evans to allow us to place his name in nomination for Vice Speaker of the House."

Motion was seconded by Dr. James Ingram, Hillsborough; Dr. Samuel E. Kaplan, of Sarasota; Dr. Fisher of Duval; Dr. Reilly of Charlotte; and several others who were not identified to the recorder.

Dr. William J. Dean, Pinellas: "On behalf of the Pinellas County Medical Society, I would like to place in nomination the name of Dr. Fred Andrews for Vice Speaker. He has been practicing in Mount Dora since 1955. He has been a delegate to this organization since 1960. He has served in many committees of this organization and is thoroughly familiar with the Florida Medical Association. Dr. Andrews is a member of the Florida Academy of General Practice, he has served in almost all of the offices in his local county society, and I might say that Lake County feels they are due—they have never had an officer of this Association. Dr. Andrews has been very active in civic affairs in his own community; he has been a councilman there, he is currently leader of a Boy Scout troop and I feel, and my whole delegation feels, that he would make an excellent Vice Speaker of the House."

Nomination was seconded by Dr. Emmet Ferguson of Duval and Dr. Bernard Kimmel of Palm Beach.

Dr. Donegan resumed the Chair.

The Vice Speaker announced it would be necessary to have a run-off election between Dr. Reilly and Dr. Carson for Vice President.

Dr. Franklin J. Evans, Dade: "There are one or two ways this meeting could be shortened. First I don't think the President's message should go to a reference committee. It is his privilege to say what he wishes. It is rather demeaning to present this to the House for a vote.

"Second, I do not think the report of the Committee on Archives should go to this body. We do not approve of death.

"I think the way we must rush through the serious business of this body is terrible. These deliberations take time and if necessary we should spend the entire day on them. We should not have to constantly refer to the clock. This is not in keeping with the purpose of the annual meeting."

Dr. Cleveland: "Before I present the gavel to Dr. Babers I would like to introduce the other members of my family who were not here on Thursday. My son, Dr. John Cleveland Jr. and

his wife, Cathy; my mother-in-law, Mrs. Lilla C. Lyle, and my sister-in-law, Mrs. Marguerite Cleveland."

Dr. Cleveland then turned to Dr. Babers: "Henry, it gives me great pleasure to turn over to you first, the gavel, the symbol of authority, and a very beautiful certificate which symbolizes the office which you are now taking over. I congratulate you as President of the Florida Medical Association."

Dr. Babers then presented to Dr. Cleveland the Past President's pin: "This is a very, very beautiful Past President's pin that Jack certainly deserves. Working with Jack Cleveland has been a real pleasure."

Dr. Warren Quillian and Dr. John Cleveland were asked to escort Mrs. Cleveland to the rostrum, where a portrait of Dr. Cleveland was presented to her.

Dr. Babers: "You wouldn't believe it but we have been working a whole year trying to shorten this meeting. Lord have mercy, if we work another year at this, I don't know what's going to happen. But anyhow, we are going to work at it. This has been tiring, but it has been a very viable session. There is no substitute for honest opinion and honest disagreement. As far as I am concerned, I will do my best to carry out the directives of the House of Delegates. Sometimes this will be difficult but we will make every honest, sustained, enthusiastic effort. Second, I hope we can streamline this meeting somehow next year. Third, let's use the JOURNAL of the Florida Medical Association for some of the communications. Maybe we can get better informed; maybe we can get on top of some of these controversial issues through our own JOURNAL.

"Now I would like to introduce my family—my wife, Louisa and my mother, Mrs. Babers Sr."



President Babers pins Past President's button on Dr. Cleveland.



In one candid film exposure, our photographer has accurately captured a gamut of emotions. They range from the proud satisfaction on Dr. Cleveland's face at having completed a job well done, to the determined expression, half-fearful, quizzical, uncertain anticipation of the year ahead on Dr. Babers' as he accepts the symbol of his office. Finally, we see the blissful unawareness of Dr. Cook, refusing to let any thoughts of the future cloud his happiness from the just-completed counting of ballots, elevating him to the office of president-elect.—C.M.C.

Dr. Walter E. Murphree of Alachua presented to Mrs. Babers a lovely orchid corsage.

Dr. Babers: "You all are going to spoil Louisa; she's going to expect flowers from me."

"I also want you to know my sister, Mrs. Mary Sandefer, and my office nurse, Mrs. Teresa Livingston. There are two people I would like you to meet who are not here, my daughter, Cynthia, and her husband, Bill Feaster. They are in Fort Bragg and Cynthia is supposed to deliver today—our first grandchild. Her husband's grandfather is Dr. O. O. Feaster, who was president of this Association in 1936."

"We will have a post-convention Board meeting in the Pan American Room immediately after adjournment of this meeting."

The Speaker announced the results of the election: Dr. Russell Carson was elected Vice President and Dr. Franklin J. Evans, Vice Speaker of the House.

Dr. Babers announced the members of the new Board of Governors: Dr. James T. Cook, President-Elect; Dr. Russell B. Carson, Vice President; Dr. Charles K. Donegan, Speaker of the House; Dr. Floyd Hurt, Secretary-Treasurer; Dr. J. Maxey Dell Jr.; Dr. William M. C. Wilhoit; Dr. William J. Dean; Dr. Richard Fleming; Dr. Robert Zellner, AMA Delegates; Dr. Eugene G. Peek Jr., State Board of Health; Dr. W. Dean Steward and Dr. Jack Q. Cleveland, Past Presidents.

The benediction was given by Dr. Warren Quillian: "Our Father, we thank Thee for this occasion; for the opportunity to discuss our problems, to enjoy mutual good fellowship; and to have made some decisions affecting so vitally the welfare of our patients. Continue to be our guide; protect us, and give to us wisdom, sympathy and compassion. May we proceed, strengthened with Thy love and help, to fulfill our obligations and responsibilities. These blessings we ask in Thy Holy Name. Amen."

The meeting was adjourned at 3:07 p.m.



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Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

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Indications: Peptic ulcer: duodenal, marginal, gastric, esophageal; gastroesophageal reflux; esophagitis (without stricture); irritable bowel syndrome; hyperacidity and dyspepsia; congenital shortening of esophagus with esophagitis; heartburn; spasm of the cardiac end of esophagus; gastritis; symptomatic hiatus hernia; alcoholic gastritis; functional pylorospasm.

Contraindications: Because of the anticholinergic action of orphenadrine, Estomul should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia (megaesophagus), and myasthenia gravis.

Precautions: Doses in excess of six tablets or six tablespoons of liquid daily may produce minor side actions such as dryness of the mouth or blurred vision.

Warning: Use of any drug in pregnancy, lactation or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother and child. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Side Effects: Possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Dosage: For adults: One or two tablespoons of liquid or one or two swallow tablets three times daily; depending on severity.

Availability: On Rx only. 12 oz. bottles of liquid and bottles of 100 swallow tablets.

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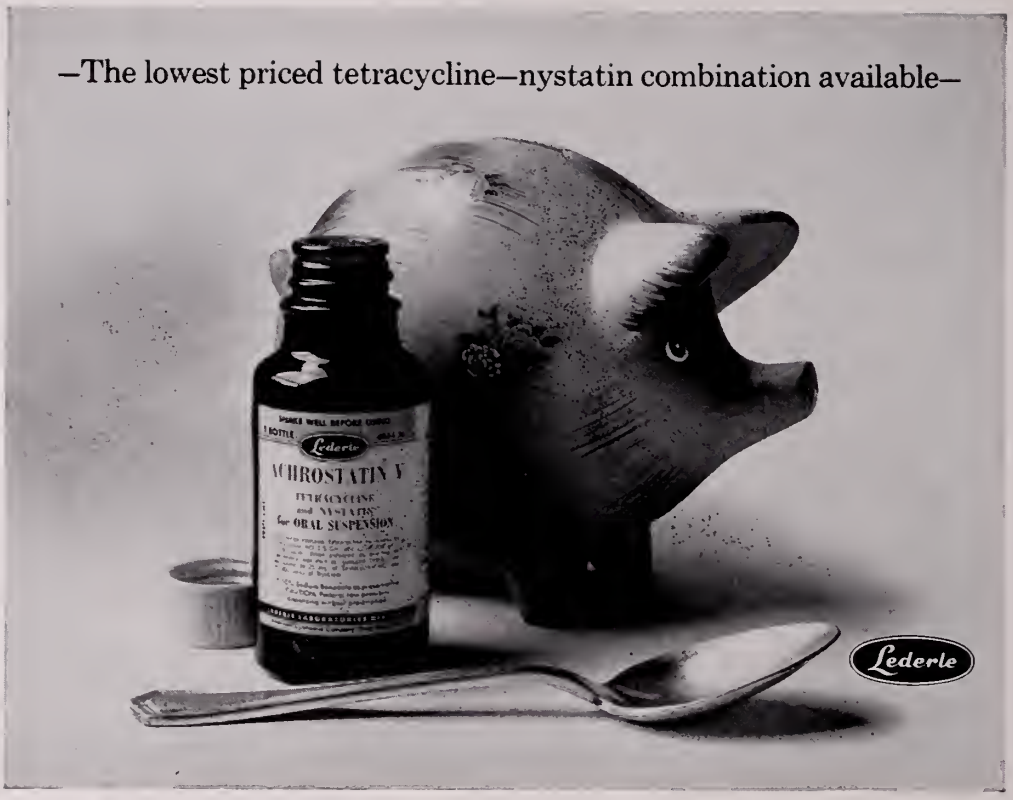
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Clues to PVD The geriatric smoker

In studies on peripheral vascular disease—a common by-product of the degenerative aging process—considerable attention has focused on the important role of smoking in the progression of the disease. Although it may not be etiologic, smoking is widely recognized as a prominent contributing factor.[1]

Skin blood flow—significant factor in PVD. Cutaneous digital vasoconstriction caused by nicotine has been observed both in normal subjects and in patients with peripheral vascular disorders.[1,2] Among patients with peripheral vascular disease, however, age and the severity of the disease appear to modify the effects of nicotine. For example, in a study of older patients with *marked* peripheral vascular disease,[3] changes induced by smoking were not statistically significant for the group as a whole. This was explained on the basis of decreased skin reactivity. *Smoking is not permissible in any stage of the disease,* since even "... minimal reduction in blood flow in patients with ischemic limbs may produce a further reduction in tissue nutrition, and thus may be another case of the proverbial straw on the camel's back."[3]

In another study of patients with peripheral vascular disease,[4] the investigators stress that decreased skin blood flow during smoking "... is the factor of most importance to the patient with peripheral vascular disease." *While such patients may adjust to the discomfort of vascular insufficiency in skeletal muscle, decreased skin blood flow may often lead to severe symptomatology.*

More and more physicians have adopted the practice of investigating for peripheral vascular disorder when confronted with a geriatric patient who is a habitual smoker. Once a diagnosis is established, therapeutic measures are directed toward increasing the peripheral circulation and appropriate management of the patient's general medical needs. These include the important safeguards of keeping warm and refraining from smoking.

Professional model posed for illustration.

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Before prescribing, please consult complete product information, a summary of which follows:
Indications: Conditions associated with deficient circulation; *e.g.*, peripheral vascular disease, vascular spasm, varicose ulcers, decubital ulcers, chilblains, Meniere's syndrome and vertigo.
Caution: Roche Laboratories endorses caution in the administration of any therapeutic agent to pregnant patients.
Side Effects: Transient flushing, gastric disturbances, minor skin rashes and allergies may occur in some patients, seldom requiring discontinuation of the drug.
Dosage: 1 or 2 Timespan Tablets morning and night.
How Supplied: Timespan Tablets—150 mg nicotinyl alcohol in the form of the tartrate salt, bottles of 50.

References: (1) Roth, G. M.; Shick, R. M., and Secrest, R. R., in James, G., and Rosenthal, T., eds.: *Tobacco and Health*, Springfield, Ill., Charles C Thomas, 1962, pp. 311-322. (2) Entmacher, P. S.: Proc. Med. Sect. Amer. Life Convention *51*:149, 1963. (3) Freund, J., and Ward, C.: Ann. New York Acad. Sci. 90:85, 1960. (4) Coffman, J. D., and Javett, S. L.: Circulation 28:932, 1963.



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So next time you hear someone say that all aspirin tablets are alike, you can say, with confidence, that it just isn't so.

You might also say that all registered nurses aren't alike, either.



Florida Medical | editorial

For The Ninety-Fifth Time

Richard M. Fleming, M.D.

On the thirteenth of May we assembled again at the Americana in Bal Harbour to open our 95th Annual Meeting. Officially recorded in attendance were 2,082 registrants including 1,168 FMA members.

Under the new format the general scientific sessions were absorbed by 14 specialty groups, some of which had combined with two or more societies or groups for presentation of a scientific program. The quality of the material presented by guest faculty and FMA members alike was excellent and the variety of subjects discussed provided a focus of interest for everyone who desired to attend. By setting an all time high in attendance at the scientific sessions of 620 members and guests, the new format has more than proved itself, and next year will undoubtedly see a continuation of this arrangement. Further consolidation of some of the specialty groups or societies would be desirable and would result in more efficient use of guest speakers.

The great interest in and the quality of the scientific programs presented proved beyond question that the FMA is truly a scientific organization. Indeed, the only reason for our political and economic activity is to promote and protect the delivery of the highest type of medical care to our patients, the public. When we cease to be a scientific organization we will have lost our raison d'etre!

Although much thought and effort has been given to revamping and streamlining the meetings of the House of Delegates, the second meeting ran well past a projected noon adjournment. With the increasing activities of our association, the time necessary to conduct our business will, if anything, increase. Therefore, we must give consideration to either lengthening the sessions or adding a new session of the House of Delegates. Perhaps a Saturday afternoon session allotted exclusively to receiving reports of the reference committees would allow ample time for discussion. Sunday could then be devoted to ceremonial proceedings and elections. We could look forward to an adjournment between 11 and 12 o'clock, which would be a boon to those who live outside Broward or Dade counties.

As to the sessions themselves, better use could be made of the projection of material on a screen. When a reference committee recommends a change from original reports or resolutions, the original can be projected as the delegate follows the reference committee report in his packet. Resolutions from the floor can likewise be projected. I have two suggestions concerning this: 1. The screen must be placed so all can see the projected material easily, and 2. All material to be projected should be typed in a machine with extra large type for easy reading. This should save a lot of reading and re-reading by the reference committee chairmen and Speaker.

The work of the House proceeded in a smooth and efficient manner, thanks to the able leadership of our very fine Speaker and Vice-Speaker. The time limitation on speaking to a subject, including nominations, deprived no one of an opportunity to express an opinion and rescued the House from much repetitious and at times, I'm afraid, irrelevant conversation. Let's keep this rule!

One of the suggestions made last year was to have the reference committees meet in one area so that persons interested in appearing before more than one committee could keep in touch with proceedings in the various committees and go back and forth as desired. The location of the hearing rooms side by side and the staggering of the most important issues to be discussed provided an opportunity for the greatest number of members to be heard on the greatest number of subjects. This was truly a democratic process—I'm sure we will continue this setup.

In summary, it was a fine meeting capping a fine year led by a fine president. What more can we ask? □

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SUMMARY OF PRESCRIBING INFORMATION

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Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

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2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

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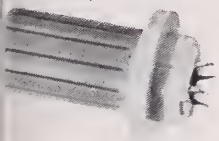
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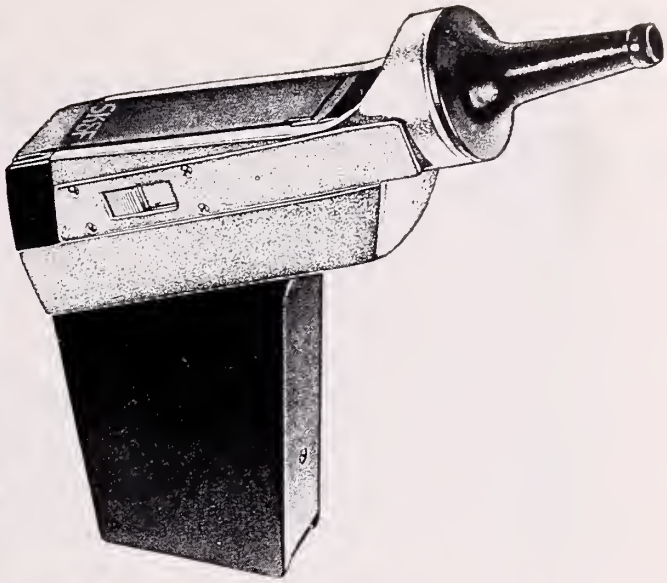
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Florida Medical | comment

Treatment Centers for Leukemia

James N. Patterson, M.D.

The writer attended a symposium on Clinical Aspects of Acute Leukemia and Burkitt's Tumor in Cambridge, Mass., September 1967. At this meeting it was stressed that if patients with acute leukemia, particularly of the acute lymphoblastic leukemia which occurs primarily in children, were sent to specialized treatment centers the chance for survival and cure would be greatly increased.

These centers are staffed with experts in the field of leukemia. They use different combinations of several chemotherapeutic agents to destroy nearly all, and hopefully all, of the leukemia cells. Some centers have so-called "Life Islands" where patients are confined to sterile rooms to cut down the chance of infection, for as these patients' bone marrow are affected by the chemotherapeutic agents used, they become highly susceptible to infection. Most of the centers have in addition all of the ancillary services necessary, such as whole blood transfusions for blood loss, packed red cells for anemia, platelet transfusion for bleeding from thrombocytopenia, and leukocyte transfusion to combat infection.

An interesting comparison was made on the results of leukemia therapy before and after the introduction of the first chemotherapeutic agent by Dr. Farber of Boston in 1947. From 1926 to 1947 there were 150 adults and children admitted to the Memorial Hospital in New York, only three of whom lived for one year and all 150 were dead in 14 months. The Acute Leukemia Task Force now has 157 patients with proved acute leukemia who have lived over five years. Nine of this group of 157 patients are still living and well after 11 years.

A list of specialized leukemia treatment centers has been compiled giving the name of the hospital, the individual to contact for admission, and cost, if any, for treatment as an outpatient and when hospitalized. Three centers will provide therapy both on an outpatient and an inpatient without cost to the patient.

You, the referring physician, must make the application to any of these centers. If the patient is accepted, he or she will be treated there during the acute phase of the disease and will be returned to you for follow-up studies during remissions. The physician at the center will probably recommend a course of therapy, spacing of blood counts and a request that the patient be referred back to the center for evaluation at stated intervals or sooner if a relapse appears imminent.

When financially necessary, the Florida Division of the American Cancer Society is in a position to assist in the cost of transportation to and from these centers for the patient and accompanying parent as well as for the board and room of the parent while there.

Any interested physician may obtain a list of these centers from your local unit of the American Cancer Society or by writing or phoning the state headquarters of the American Cancer Society, Florida Division, Inc., 2909 Bay to Bay Boulevard, Tampa, Florida 33609.

Dr. Patterson is chairman of the Committee on Leukemia and Lymphomas, American Cancer Society, Florida Division, Inc.

▸ Dr. Patterson, P.O. Box 4555, Tampa 33607.



The American Society of Internal Medicine has named the Florida Society of Internal Medicine recipient of its first "Component Society of the Year" award in recognition of its distinguished service to the society and to internal medicine and for its contribution to an understanding of the importance of the role of socioeconomics in the practice of medicine.

Shown is Dr. W. Dean Steward, Orlando (right foreground), delegate to the American Society of Internal Medicine, presenting the award to Dr. William M. Straight, Miami, FSIM president. Other FSIM members shown are (left to right) Drs. Scheffel H. Wright, Miami; Miles J. Bielek, Fort Lauderdale; Fred A. Butler, Naples; Addison L. Messer, St. Petersburg; Robert E. Raborn, Boynton Beach, and Lawrence E. Geeslin, Jacksonville.

Stimulating Scientific Material

FRANZ STEWART, M.D.
EDITOR

Good study, valuable information and the opportunity for critical thinking comes about from reading, but something else is needed. There is something about motivation, there is something which brings a man ideas and makes him think more creatively than he realized he could. This occurs when he is exposed to the thinking of colleagues, and when he listens to another present ideas. This personalized communication adds a stimulus which cannot be found elsewhere.

At the annual meeting there were programs created by the various specialty groups and in visiting these one found some papers well attended, some papers poorly attended but, above all, excellent material was available and the total number attending the scientific sessions was greater than we have seen before.

For various disciplines to cluster their material around the annual meeting will improve the quality for each, and by being together, multiply by many times the stimulus and value to each physician.

Annis Nomination

TO: AMA Delegates

FROM: Henry J. Babers Jr., M.D.
President

The Board of Governors reaffirmed and our House of Delegates on May 18, 1969 unanimously voted to enthusiastically support the nomination of Edward R. Annis, M.D., for re-election to the Board of Trustees of the American Medical Association.

Dr. Annis has advised me that he appreciates the strong support of our Association, but has considered the various circumstances and wishes his name to be withdrawn from consideration and will not accept re-election to the AMA Board of Trustees.

Dr. Annis expressed his desire and willingness to assist organized medicine at any time when he was needed or could be of help.

I wish to thank each delegate for the cooperation extended to our Association.

Our Mail

Journal Covers

Dear Editor:

Today I am mailing to you the photograph which you requested for the July issue of the JOURNAL. This print has been properly processed to serve for the necessary reproduction.

It is a pleasure to furnish this little piece of art work. Having served for many years as regional director of the American Physicians' Art Association and having won the top award of that group for landscape photography, I want you to know that the covers of our JOURNAL are a real contrast to the dull, uninteresting covers of many state journals which remind me of some sort of congressional record bulletin.

In addition, I presently serve on the editorial board of the American Journal of Orthopaedics and being exposed to this aspect of medical publications, I have also admired the editorial style of the JOURNAL of the Florida Medical Association.

If I can be of help to you in any way in preparation of future editorials, feel free to call on me at any time. I am a busy doctor; however, a busy man is never too busy.

LYON K. LOOMIS, M.D.
MIAMI

Dr. Loomis' fine cover photo, which won an "Award of Merit" at the annual meeting benefit art show, also serves to remind us of the fourth of July.—Ed.

Renal Articles

Dear Editor:

I want to tell you how much I enjoyed the latest issue of the JOURNAL. I am speaking particularly about the series on renal disease, which you organized, and which contains brief articles by various members of the faculty of the University of Miami School of Medicine and the V.A. Hospital.

This is the first time I have found a series of articles in the FMA JOURNAL which are worth reading over and over again, and I am making them a part of my permanent file.

Thanks very much for this initiative and for the intellectual treat and, again, congratulations.

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PRECAUTIONS: Administer with caution to persons with known idiosyncrasy to atropine or cardiac disease. While under this therapy the urine is blue; patients should be so advised to allay apprehension.

SIDE EFFECTS: Neither irritation nor other untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occur, decrease dosage. If rapid pulse, dizziness, or blurring of vision occur, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

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Long recognized for its usefulness in the treatment of moderate to severe anxiety, Mellaril is now also known to be effective against mixed anxiety-depression.

Often the symptoms of anxiety states are difficult to sort out—even with the most careful probing. The patient may manifest symptoms of agitation, restlessness, insomnia, somatic complaints. But what of the depression that may be mixed in the total picture? It is reassuring to know that Mellaril may be prescribed—with strong possibilities of success—when there is anxiety alone or a mixture of anxiety and depression.

Before prescribing or administering, see Sandoz literature for full product information, including adverse reactions reported with phenothiazines. The following is a brief precautionary statement.

Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine hydrochloride). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

Mellaril®
(Thioridazine HCl)
25 mg. t.i.d.

for moderate to severe anxiety and mixed anxiety-depression

SANDOZ SANDOZ PHARMACEUTICALS, HANOVER, N. J. 68-169



...now fast relief of hay fever symptoms with

NTZ®

Nasal Spray

When pollens fly, just one or two squirts of NTz in each nostril, followed in a few minutes by a second spraying, shrink swollen nasal passages almost on contact. And breathing comfort follows. The antihistamine component of NTz helps combat the allergic reaction and lessen rhinorrhea, sneezing and itching; its antiseptic wetting agent promotes rapid spread of components.

NTz Nasal Spray affords the well-known benefits of Neo-Synephrine® in a carefully balanced formula which includes:



Winthrop

Neo-Synephrine® (brand of phenylephrine) HCl, 0.5% (adult strength), decongestant
Thenfadil® (brand of thenyldiamine) HCl, 0.1%, antihistamine
Zephiran® (brand of benzalkonium as chloride, refined) Cl, 1:5000, antiseptic wetting agent

Treatments with NTz should be repeated every three or four hours as needed. NTz is for temporary relief of nasal symptoms and overdosage should be avoided. Available in squeeze bottles of 20 ml. and 1 oz. bottles with dropper.

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Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

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For children and elderly patients you may prefer caffeine-free ACHROCIDIN Syrup. Each 5 cc contains: ACHROMYCIN (Tetracycline) equivalent to Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Salicylamide 150 mg.; Ascorbic Acid (C) 25 mg.; Pyrilamine Maleate 15 mg.

Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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327-8

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(SODIUM BUTABARBITAL)

the "daytime sedative" for everyday situational stress

When stress is situational—environmental pressure, worry over illness—the treatment often calls for an anxiety-allaying agent which has a prompt and predictable calming action and is remarkably well tolerated. BUTISOL SODIUM (sodium butabarbital) meets this therapeutic need.

After 30 years of clinical use . . . still a first choice among many physicians for dependability, safety and economy in mild to moderate anxiety.

Contraindications: Porphyria or sensitivity to barbiturates.

Precautions: Exercise caution in moderate to severe hepatic disease. Elderly or debilitated patients may react with marked excitement or depression.

Adverse Reactions: Drowsiness at daytime sedative dose levels, skin rashes, "hangover" and systemic disturbances are seldom seen.

Warning: May be habit forming.

Usual Adult Dosage: As a daytime sedative, 15 mg. (¼ gr.) to 30 mg. (½ gr.) t.i.d. or q.i.d.

Available for daytime sedation: Tablets, 15 mg. (¼ gr.), 30 mg. (½ gr.); Elixir, 30 mg. per 5 cc. (alcohol 7%).

BUTICAPS® [Capsules BUTISOL SODIUM (sodium butabarbital)] 15 mg. (¼ gr.), 30 mg. (½ gr.).

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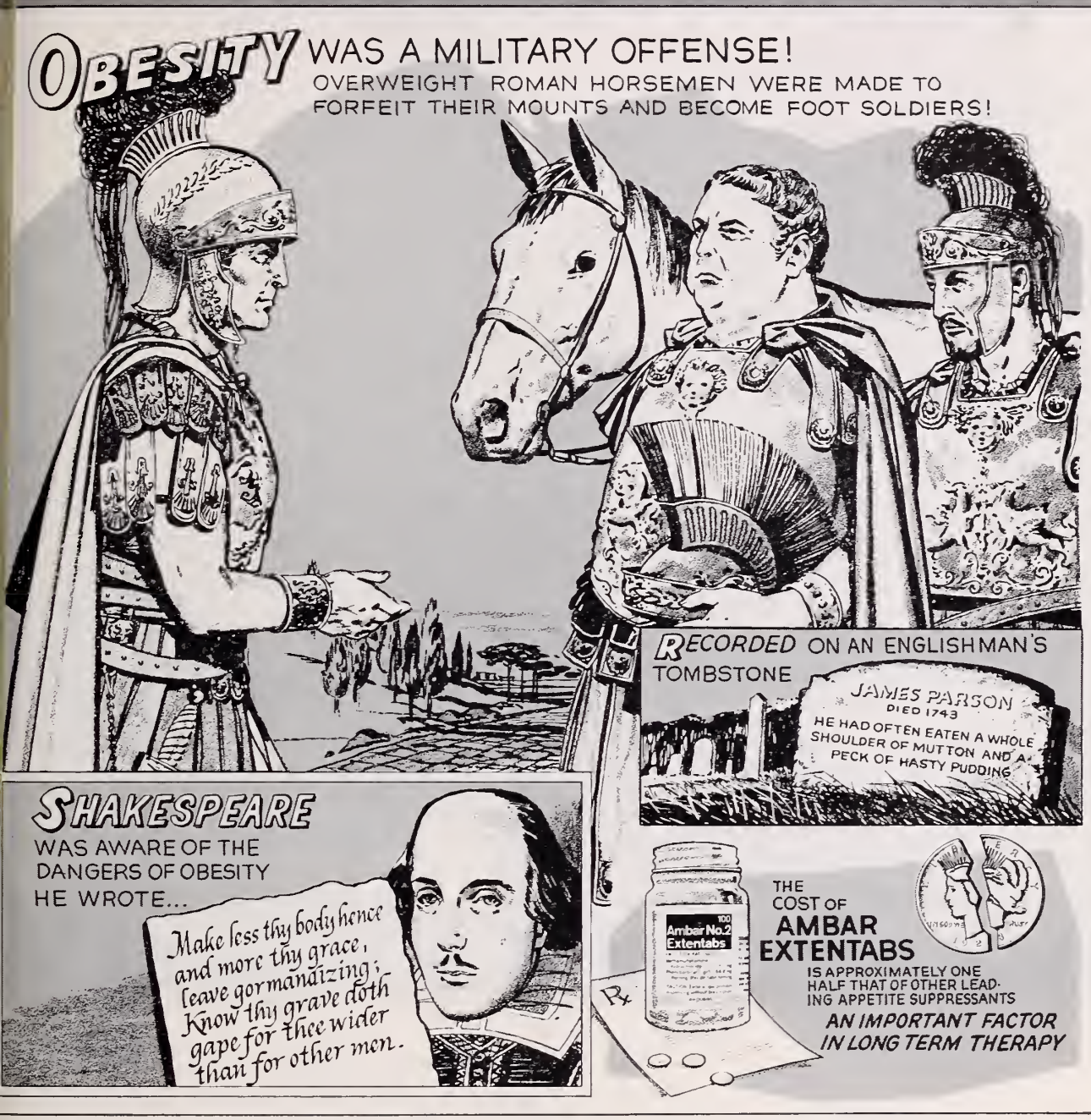
McNeil Laboratories, Inc., Fort Washington, Pa.



The AMBAR® SCRAPBOOK of

Obesity Oddities

FACT & LEGEND



CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

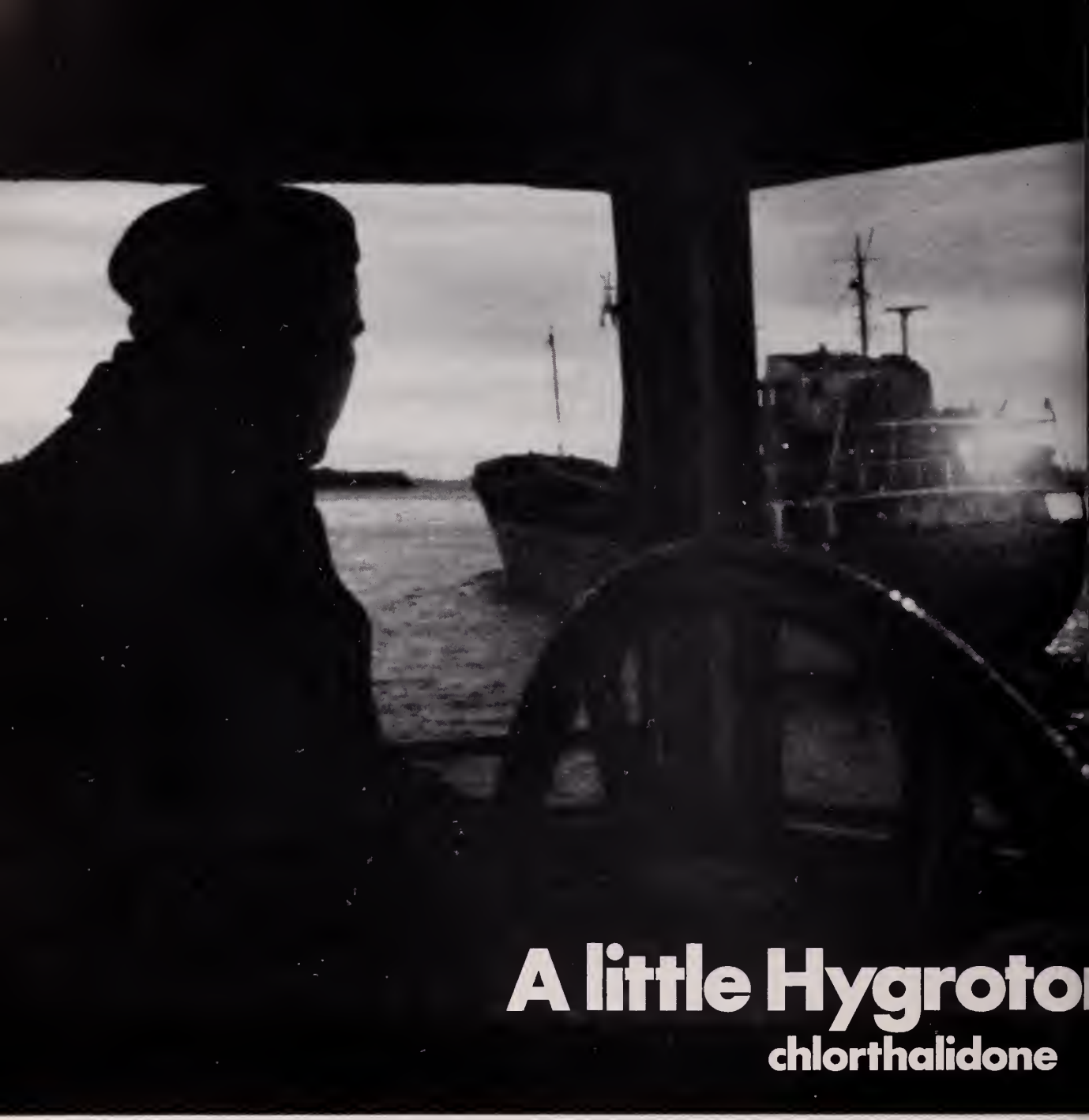
One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety... helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220

A·H·ROBINS



HY-6674



an work a long diuretic day

the way from one daily tablet to the next help control edema and hypertension

prolonged action usually provides smooth, sustained diuretic ectiveness; real one-a-day dosage, right from the start; convenience d economy.

groton, chlorthalidone, can cause side effects. And it's contra- dicated in hypersensitivity to the drug and severe renal and patic diseases.

eck the prescribing information. It's summarized on the next page.

Geigy



A little Hygroton® can work a long diuretic day

chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and mast cases of severe renal or hepotic diseases.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal poin, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant women and nursing mothers since the drug may cross the placental barrier and appear in cord blood and since thiazides may appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympothectomy patients and in potients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepotic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in potients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric poin or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, poresthesia, and photosensitization.

Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.

(B)46-230-E

For full details, please see the complete prescribing information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502

HY-6674

Florida Medical meetings

FMA Approved Postgraduate Meetings

AUGUST

21-23 Postgraduate Obstetric-Pediatric Seminar, Pier 66, Ft. Lauderdale

SEPTEMBER

12-13 Neonatology for the Family Physician, University of Florida College of Medicine, Gainesville

19-20 Seminar in Otolaryngology, University of Florida College of Medicine, Gainesville

20 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

27 Eighth Annual Physician Seminar on Respiratory Diseases, Orange Memorial Hospital Auditorium, Orlando

OCTOBER

4 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

16-18 Neurology-Neurosurgery Seminar, University of Florida College of Medicine, Gainesville

18 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

23-26 Seventh Annual Cardiology Seminar, Tides Bath Club, Redington Beach

25 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

NOVEMBER

6- 7 Seminar on Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville

7- 8 ENT for the Family Practitioner, University of Miami School of Medicine, Miami

8 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

12-15 Today's Hospital Problems: An Interdisciplinary Approach Third Conference, Tides Hotel and Bath Club, St. Petersburg

DECEMBER

12-14 Neuromuscular Skeletal Disorders: Current Concepts in Surgery and Rehabilitation, Americana Hotel, Miami Beach

15-17 The Dysvascular Amputee: Surgical and Prosthetic Management, Americana Hotel, Miami Beach

National and Regional Meetings in Florida

1969

DECEMBER

6-11 American Academy of Dermatology, Americana Hotel, Miami Beach

1970

MARCH

14-18 American Society of Abdominal Surgeons Clinical Congress, Deauville Hotel, Miami Beach

19-24 American Dermatological Association, Boca Raton Hotel, Boca Raton

APRIL

12-16 American Proctologic Society, Diplomat Hotel, Hollywood

19-20 American Otological Society, Hollywood Beach Hotel, Hollywood

20-21 American Broncho-Esophagological Association, Hollywood Beach Hotel, Hollywood

21-23 American Laryngological, Rhinological and Otological Society, Hollywood Beach Hotel, Hollywood

23-24 American Society for Head and Neck Surgery, Hollywood Beach Hotel, Hollywood

24-25 American Laryngological Association, Hollywood Beach Hotel, Hollywood

24-26 American Academy of Neurology, Americana Hotel, Miami Beach

SEPTEMBER

29-Oct. 2 American Roentgen Ray Society, Deauville Hotel, Miami Beach

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton

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Weir M. Tucker, M.D.
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This "case history" runs to some 10,000 pages

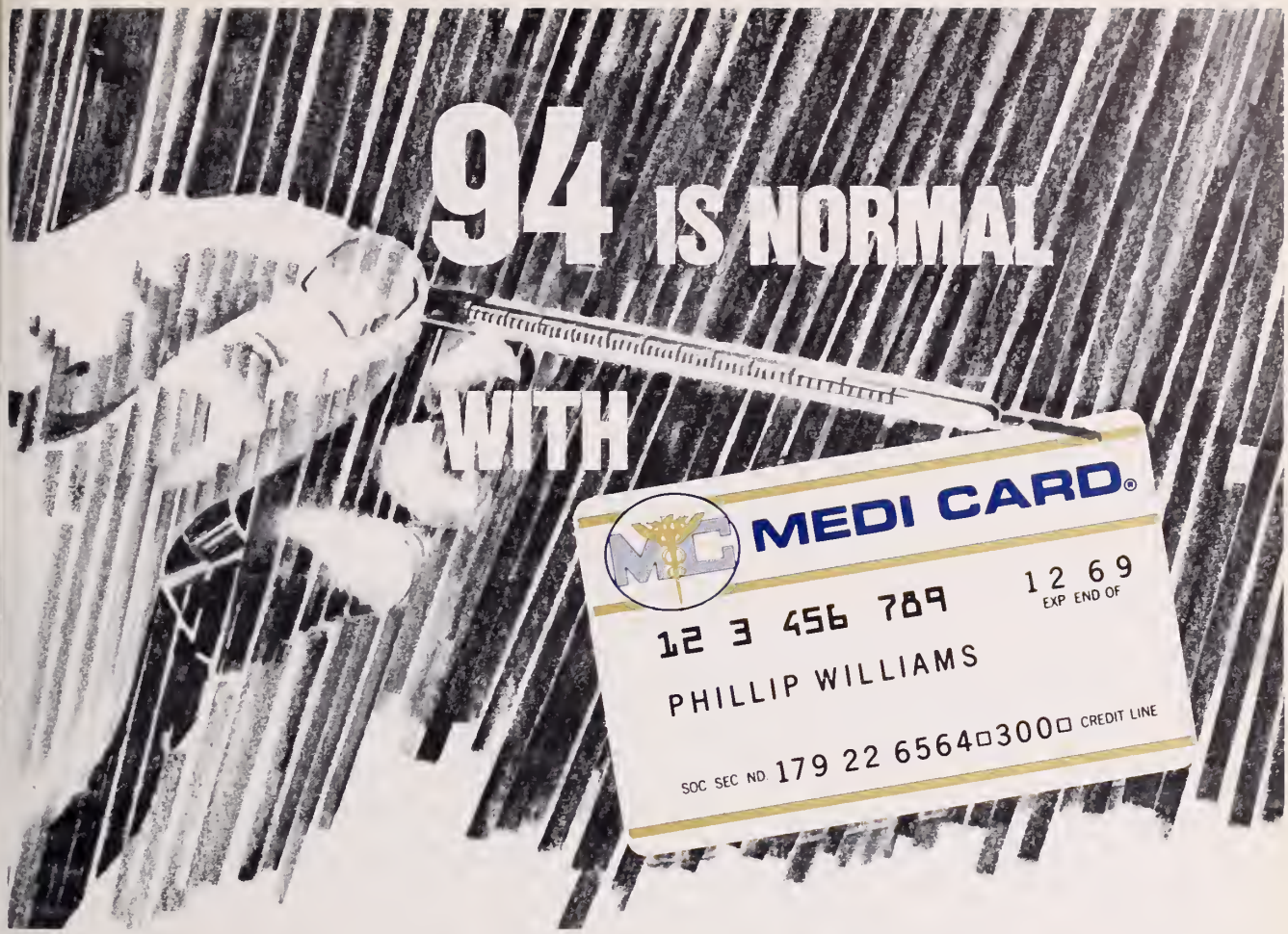
This is a typical "case history" of one new drug – or, rather, a proposed new drug – assembled for submission to the U.S. Federal Food and Drug Administration. These volumes are the result of several years' work by thousands of professional and skilled personnel in just one pharmaceutical company's research laboratories, and by hundreds of physicians in medical schools, hospitals, and private practice. They cover every aspect of experience with this proposed new agent from chemical laboratory to clinic, from mouse to man. Each volume could conceivably represent hundreds of thousands of dollars of financial investment, countless hours of human effort. This veritable mountain of data stands behind every new agent offered to you by pharmaceutical manufacturers – a reassuring testimonial to the efficacy, safety and purity of the drugs you will prescribe today to lower the cost of disease to your patients.

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This unique professional credit card exclusively for health services helps you get out of the credit and collection business . . . frees your capital for investment. You merely mail your draft to Medi Card on simple, easy-to-use forms supplied at no cost. Medi Card pays you promptly, less only a 6% service fee. There is no commitment on your part, nothing to join, no directory or listing of any kind. *Your patients benefit, in other ways, too!* Medi Card makes from $100 to $5000 available to patient-members exclusively for professional health services . . . lets them take up to 24 months to pay. As an additional benefit, Medi Card offers a round-the-clock computerized emergency medical information service for cardholders.

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P.O. Box 650
Bala Cynwyd, Pa. 19004



Medi Card answers some frequently asked questions.

Q. Does Medi Card conflict with pre-paid health plans?

A. No. On the contrary, Medi Card both complements and supplements Blue Cross/Blue Shield and other pre-paid insurance programs; that portion which your patient would normally pay by cash may be charged to Medi Card.

Q. Can Medi Card now take over my patients' accounts receivable?

A. Medi Card cannot take over your patients' accounts receivable at this time but will process all patient applications received from you without charge.

Q. Do you make an individual credit check on each one of my patients?

A. Every application for Medi Card receives a thorough credit check before any card is issued.

Q. Are patient application forms readily available?

A. Yes. Applications to Medi Card are included in your professional kit and additional ones are available without charge.

Q. What methods will you use for collecting delinquent accounts? How does my state professional society feel about this?

A. Delinquent accounts will be automatically transferred to the same collection agency currently used by your local professional society.

Q. How does the AMA, the ADA, the AHA and my state professional society feel about Medi Card?

A. All terms of the Medi Card program have been presented and thoroughly discussed with these professional associations. They have informed us that they neither approve nor disapprove of Medi Card, they have no objections to our presenting the program to the individual members of the professions.

Q. Do I have to join, or become a member of Medi Card? Is there anything to pay in order to participate in the Medi Card program?

A. There is nothing to pay. You neither join Medi Card nor make any agreement with Medi Card. You merely honor the credit card upon its presentation, and are required to sign a statement accompanying the patient's first draft acknowledging your understanding of the program and Medi Card's 6% service charge.

Q. Can a card holder's Medi Card be used by various members of the family?

A. Medi Card may be used by any member of the family providing the card holder signs the Medi Card draft.

Q. What about Medi Card's financial responsibility?

A. Medi Card. a publicly held corporation, is associated in this program with Financial Services, Inc., a wholly owned subsidiary of the Diners Club.

Q. How much paperwork is involved?

A. The Medi Card draft is the simplest form ever devised for the payment of professional fees and services. Only two lines of the draft have been allotted for briefly outlining treatment. It is as fast as writing a personal check.

Q. Is there recourse to me in the event the patient does not pay Medi Card?

A. There is no recourse whatsoever. All the collection responsibility lies with Medi Card thus freeing you to maintain a professional relationship with your patient.

Q. Under what conditions will Medi Card refuse to pay a draft?

A. (1) Where the charge is incurred after the expiration date shown on the card. (2) Failure to fill out and mail processing card to us before, or along with, first draft.

Q. How much of my bill will Medi Card pay?

A. Medi Card will pay you up to the amount of credit shown on the face of the card, less the service charge.

Q. How does Medi Card protect the cardholder?

A. (1) Medi Card protects the cardholder by providing funds for professional services in amounts from $100 to $5,000 when they are needed. (2) Medi Card further protects the cardholder and his family by providing a 24-hour nationwide emergency medical information service making personal medical information available immediately through the use of a Medi Card toll-free telephone credit call. (3) In addition, this service provides all necessary professional payment information to the caller.

Q. How will I know each individual patient's Credit Limit?

A. Each patient's Credit Limit is clearly shown on the face of his Medi Card.

Q. Will you publish a list of professional participants?

A. No. Medi Card will not publish such a list because professional participants are not members of Medi Card.

Florida Organizations of Medical Interest Meetings and Officers

Organization	President	Secretary	Annual Meeting
da Medical Association	Henry J. Babers Jr., Gainesville	Floyd K. Hurt, Jacksonville	Hollywood, May 7-10, 1970
ɔrida Specialty Societies			
gy Society	Melvin Newman, Jacksonville	Roger A. Lipton, Ft. Lauderdale	
thesiologists, Soc. of	Franklin B. McKechnie, Winter Pk.	George T. Edwards, Ft. Lauderdale	
t Phys., Am. Coll., Fla. Chap.	Howard M. Dubose, Lakeland	Richard A. Elias, Miami	
ıatology, Society of	William W. Bruce, Winter Park	Arnold R. Goddard, Miami	
roenterologic Society	Charles E. Aucremann, St. Pet'sb'g	James H. Johnson, Lakeland	
:ral Practice, Academy	Edward G. Haskell Jr., Tallahassee	Joseph P. Hendrix, Port St. Joe	
·nal Medicine	Roy Hancock, Jacksonville	Victor Knight, Tampa	
·ology, Florida Society of	Francis L. Merritt Jr., Lakeland	James B. Perry, Ft. Lauderdale	
·osurgical Society	Jack W. Barrett, Miami	Howard C. Chandler, Jacksonville	
. & Gynec. Society	Curtis G. Rorebeck, Tampa	Charles A. Johnson Jr., Clearwater	
.halmology Society	Ralph E. Kirsch, Miami	Curtis D. Benton Jr., Ft. Lauderdale	
ıryngology Society	Robert J. Pfaff, Lakeland	Albert A. Wilson, Tampa	
ıryngology Society	West Bitzer, Ocala	James H. Mendel Jr., S. Miami	
ologists, Society of	William F. Mahoney, Sarasota	Wallace M. Graves Jr., Ft. Myers	
atric Society	Ray O. Edwards Jr., Jacksonville	James M. Stem, Clearwater	
atric Surgeons, Fla. Assn.	Albert H. Wilkinson Jr., J'ville	Luis F. Mencia, Miami	
ɜ. Med. & Rehab., Fla. Soc.	Sterling H. Huntington, Coral G'les	Justine L. Vaughen, Orlando	
ıic & Reconstr. Surgery	Diran M. Seropian, Ft. Lauderdale	William G. Taylor, Tampa	
·entive Medicine, Fla Soc.	Carl Fromhagen Jr., Clearwater	James A. Horton, Okeechobee	
·tologic Society	Paul J. Fuzy Jr., Ft. Lauderdale	Manuel L. Carbonell, Miami	
·hiatric Society	Bernard Tumarkin, Coral Gables	Walter M. White Jr., Miami	
iological Society	Malcolm Van de Water, W. P. B.	Robert H. Nickau, W. Palm Beach	
;eons, Am. Coll., Fla. Chap.	Richard C. Dever, Miami	David S. Hubbell, St. Petersburg	
;eons, Gen., Fla. Assn.	John R. Hilsenbeck, Miami	Ensor R. Dunsford Jr., Orange Pk.	
;eons, Int. Coll., Fla. Chap	Morris H. Blau, Miami	William L. Wagener Jr., Coral Gables	
;eons, Thoracic, Fla. Society	Richard H. Blank, Tampa	Carlos R. Lombardo, Miami	
logical Society	Victor A. Politano, Miami	Curtis W. Bowman, St. Petersburg	
:rican Cancer Society, Div.	David S. Hubbell, M.D., St. Petersburg	Mrs. Peggy Lombardo, J'ville	Orlando, November 1969
ıritis Foundation, Chap.	Mr. William Namack III, Bradenton	Samuel P. Lewis, Hollywood	St. Petersburg, July 1970
ɔd Banks, Association	Louise R. Wilson, Gainesville	Mrs. Alma Del Valle, Tampa	Miami Beach, May 1-3, '70
ɜ Shield of Florida, Inc.	Warren W. Quillian, M.D., Coral Gables	Henry J. Babers Jr., M.D., Gainesville	Hollywood, May 7-10, '70
rd of Medical Examiners	Carl C. Mendoza, M.D., Jacksonville	J. Champneys Taylor, M.D., 1661 Riverside Ave., Jacksonville	N. Miami Beach, July 13-15, '69
ɔpled Children & Adults, Soc.	Thomas B. Abbott, Ph.D., G'ville	Mr. Ray J. Worssm, Sarasota	St. Petersburg, Oct. 11, '69
ɔetes Association	Robert B. Katims, M.D., Miami	Joseph C. Shipp, M.D., G'ville	Miami Beach, Oct. 10-11, '69
rt Association	Addison L. Messer, M.D., St. Petersburg	J. B. Shearouse, W. Palm Beach	Redington B'ch, May 22-24, '70
ıtal Health Assn. of Fla., Inc.	John F. Gaillard, Jacksonville	Warren B. Wall, Avon Park	Tampa, Apr. 16-19, '70
vention of Blindness, Soc.	Mr. R. B. Matthews, Coral Gables	Mrs. Richard Nosti, Tampa	February 1970
ɔlic Health Association	Mrs. Mabel Johansson, W. P. B.	Mrs. Harriett Brooks, Pensacola	Jacksonville, Oct. 16-18, '69
arded Children, Association	Mrs. Theodore Norley, W. P. B.	Mr. Leonard Stafford, Pensacola	Orlando, Fall 1970
ɔracic Society	Nelson H. Kraeft, Tallahassee	Richard G. Connar, M.D., Tampa	
ɔerculosis & Res. Dis. Assn.	Jack C. Inman, Orlando	Mrs. Richard Malchon, St. Petersburg	
ted Cerebral Palsy of Florida	Mr. Clyde Hagler, Pensacola	Mr. Tom Freeman, Sanford	November 14-15, '69
man's Auxiliary	Mrs. C. Herbert Gilliland, G'ville	Mrs. Lloyd K. Netto, W. P. Bch.	Hollywood, May 7-10, '70

(Most Specialty Group meetings are scheduled at the time of the annual meeting of the Association)

County Medical Societies of Florida

SOCIETY	PRESIDENT	SECRETARY	MEETING DATE	TOTAL MEMBERS Associate	Active
Alachua	Taylor H. Kirby Jr., Gainesville	George A. Dell, Gainesville	2nd Tues.	56	148
**Bradford, Gilchrist, Union*					
Bay	Owen Reese Jr., Panama City	John F. Mason, Panama City	1st Tues.	1	38
Brevard	Michael Foley, Melbourne	John Blackburn, Melbourne	2nd Tues.	17	166
Broward	Russell B. Carson, Ft. Lauderdale	Robert J. Brennan, Ft. Lauderdale	4th Tues.	65	483
Charlotte	Charles M. Wilson, Port Charlotte	Francis R. Meyers, Punta Gorda	2nd Tues.	0	16
Clay	E. Charlton Prather, Orange Park	A. Y. Covington, Green Cove Springs	4th Tues.	0	14
Collier	Ethel H. Trygstad, Naples	Lucian L. Alexander, Naples	3rd Wed.	0	37
Columbia	Charles T. Ozaki, Lake City	Don D. Weiffenbach, Lake City	3rd Wed.	0	15
Dade	Francis N. Cooke, Miami	John B. Liebler, Coral Gables	1st Tues.	247	1,507
DeSoto-Hardee-Glades	Malcolm Sayre, Wauchula	Barbara C. Carlton, Wauchula	1st Tues.	0	16
Duval	Wilbur Sumner, Jacksonville	John A. Rush Jr., Jacksonville	1st Tues.	45	439
Escambia	Reed Bell, Pensacola	Theodore J. Marshall, Pensacola	2nd Tues.	7	134
Franklin-Gulf	Photis Nichols, Apalachicola	Shirley Simpson, Port St. Joe	Last Wed.	1	5
Highlands	Walter M. Ost, Avon Park	Donald C. Hartwell, Avon Park	3rd Mon.	2	24
Hillsborough	James M. Ingram, Tampa	Rodney D. Steinmetz, Tampa	1st Tues.	27	358
Indian River	Hampton L. Schofield Jr., Vero Beach	John H. Terry, Vero Beach	2nd Tues.	5	28
Lake	James Todd, Eustis	Thomas H. Nichols, Clermont	1st Wed.	2	45
Lee-Hendry	Edward W. Salko, Ft. Myers	Marcus M. Moore, Fort Myers	3rd Mon.	14	76
Leon-Wakulla-Jefferson	Frank E. All, Tallahassee	Luther L. Pararo, Tallahassee	1st Mon.	19	89
Madison	Julian M. DuRant, Madison	A. Franklin Harrison, Madison	1st Tues.	0	5
Manatee	Edzell P. Dickerson, Bradenton	Roger A. Meyer, Bradenton	2nd Tues.	5	63
Marion	Edwin H. Updike, Ocala	C. Brooks Henderson, Ocala	3rd Tues.	7	50
**Levy*					
Monroe	Walter R. McCook, Key West	Ronald H. Chase, Key West	1st Thurs.	2	25
Nassau	Cecil B. Brewton, Fernandina Beach	John B. Britton, Fernandina Beach	2nd Thurs.	5	7
**Baker*					
Okaloosa	Maxwell G. Carroll, Crestview	H. C. White, Fort Walton Beach	1st Wed.	1	28
Orange	Joseph G. Matthews, Orlando	Paul C. Harding, Orlando	3rd Wed.	63	342
**Osceola*					
Palm Beach	Bernard Kimmel, W. Palm Beach	Robert R. Wadlund, Delray Beach	4th Mon.	65	289
Panhandle	Henry A. Knowles, Marianna	Glenn E. Padgett, Marianna	1st Thurs.	1	33
Pasco-Hernando-Citrus	Edwin K. House, Brooksville	James W. Basinger, Dade City	2nd Thurs.	0	33
**Sumter*					
Pinellas	John T. Karaphillis, Clearwater	Joseph A. Ezzo, St. Petersburg	1st Mon.	82	413
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Santa Rosa	Elbert W. Sutton, Milton	Claude J. Barnes, Milton	2nd Tues.	1	14
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Seminole	Luis Perez, Sanford	Frederick Weigand, Deltona	2nd Tues.	1	30
Suwannee-Hamilton-LaFayette	Hugo Sotolongo, Live Oak	Leo F. Klenk, Jasper	1st Sat.	0	7
Taylor	Hoyt Horne, Perry	John A. Dyal Jr., Perry	Last Fri.	1	7
**Dixie*					
Volusia	Thomas D. Cook, Daytona Beach	Richard W. Dodd, Daytona Beach	2nd Tues.	8	130
**Flagler*					
Walton	Thomas G. Spence, DeFuniak Springs	Edgar H. Meyers, DeFuniak Springs	3rd Tues.	0	8
			Total	767	5,531
			Grand Total	6,298	

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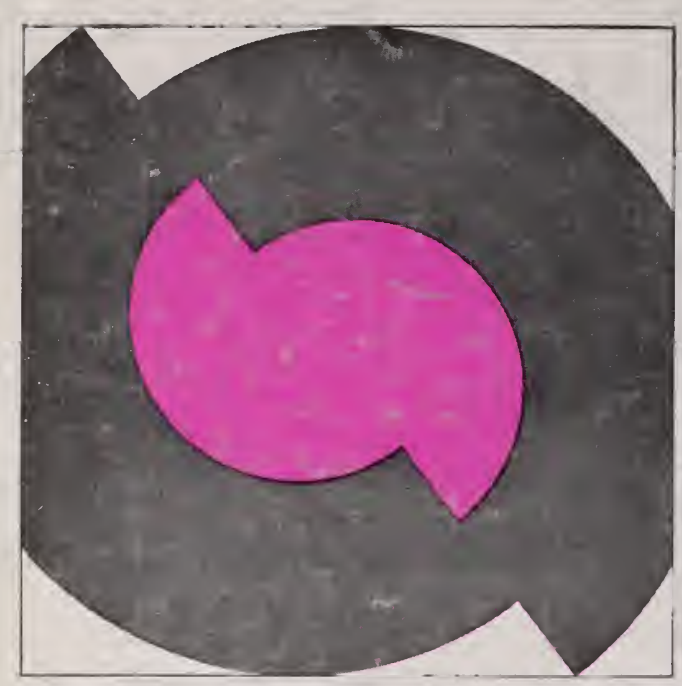
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to emotional harmony

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiotric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulacytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

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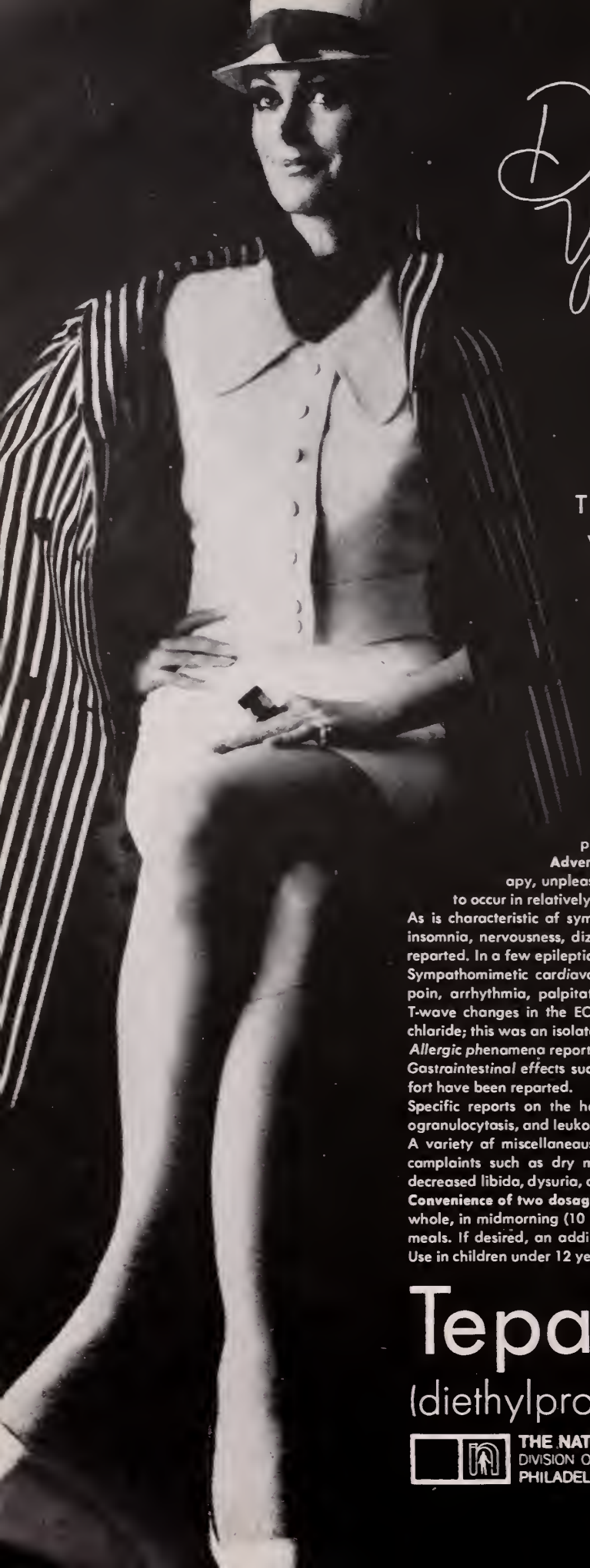
Florida Medical ASSOCIATION

AUGUST, 1969 • VOLUME 56 • NUMBER 8

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As is characteristic af sympathomimetic agents, it may occasionally cause CNS effects such insomnia, nervousness, dizziness, anxiety, and jitteriness. In cantrast, CNS depressian has be reparted. In a few epileptics an increase in canvulsive episodes has been reparted.

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A variety af miscellaneaus adverse reactians have been reparted by physicians. These inclu camplaints such as dry mouth, headache, dyspnea, menstrual upset, hair lass, muscle po decreased libida, dysuria, and palyuria.

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(diethylpropion hydrochloride)

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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. C stant observation is essential. If new infections appear, appropri measures should be taken. In infants, increased intracranial press with bulging fontanels has been observed. All signs and symptoms h disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, di rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculop ular and erythematous rashes; a rare case of exfoliative dermatitis h been reported. Photosensitivity; onycholysis and discoloration of t nails (rare). Kidney—rise in BUN, apparently dose related. Transie increase in urinary output, sometimes accompanied by thirst (rar Hypersensitivity reactions—urticaria, angioneurotic edema, anaphylax Teeth—dental staining (yellow-brown) in children of mothers given t drug during the latter half of pregnancy, and in children given the dr during the neonatal period, infancy and early childhood. Enamel hyp plasia has been seen in a few children. If adverse reaction or idiosy crasy occurs, discontinue medication and institute appropriate thera Demethylchlortetracycline may form a stable calcium complex in a bone-forming tissue with no serious harmful effects reported thus f in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should given 1 hour before or 2 hours after meals, since absorption is impair by the concomitant administration of high calcium content drugs, foo and some dairy products. Treatment of streptococcal infections shou continue for 10 days, even though symptoms have subsided.

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THE JOURNAL OF THE
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OFTEN... HER LOWER G. I. TRACT



Psycho-abdominal Distress: Frequently Female

Women aged 15 to 45 appear to be more prone than men to bloating, cramping pain of stress-related intestinal disturbances such as irritable or spastic colon.[1,2]

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Often needed is therapy adequate to control both the somatic and the emotional components of psycho-abdominal complaints.

Definitive Dual Therapy

'Milpath' contains a proven synthetic anticholinergic useful for relieving hypermotility, spasm, and hypersecretion of the gastrointestinal tract.

In addition, 'Milpath' provides a time-tested tranquilizer for mild but effective anti-anxiety action.

With Flexible Dosage

- 'Milpath'-400 (meprobamate 400 mg. + tridihexethyl chloride 25 mg.) Usual adult dose: 1 tablet *t.i.d.* and 2 at bedtime.
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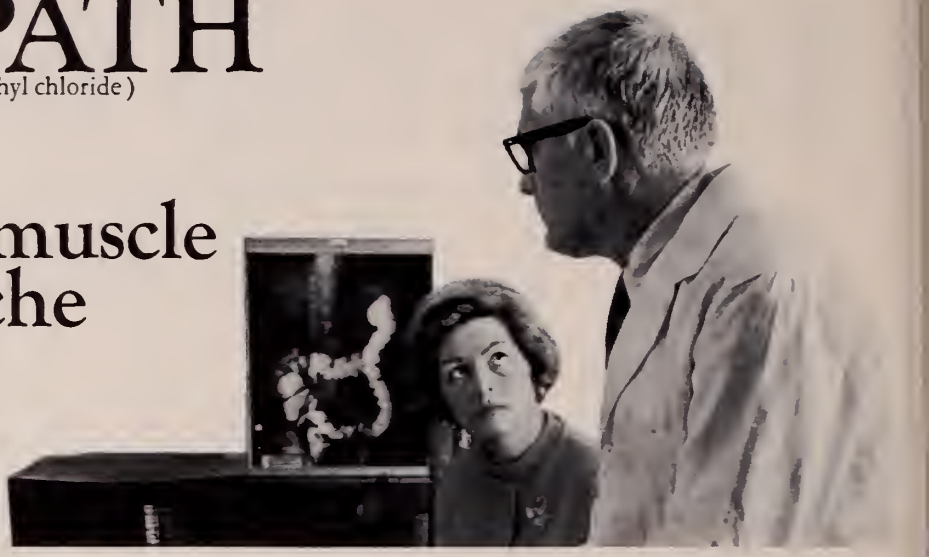
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(meprobamate + tridihexethyl chloride)

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One 'Milpath'-400 tablet, three times a day at mealtimes, and two at bedtime. For greater anticholinergic effect, two 'Milpath'-200 tablets, three times a day at mealtimes and two at bedtime. Doses of meprobamate above 2400 mg. daily not recommended.

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Useful in organic and functional disorders with hypersecretion and hypermotility of G.I. tract, especially when accompanied by anxiety, neurosis, or tension states. Should be used as an adjunct to all other therapeutic measures.

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Tridihexethyl chloride: Urinary bladder-neck obstructions, e.g., prostatic obstruction due to hypertrophy; pyloric obstructions because of reduced motility and tonus: organic cardiospasm (megaesophagus); glaucoma; possibly in stenosing gastric or duodenal ulcers with significant gastric retention.

Meprobamate: Previous allergic or idiosyncratic reactions to meprobamate.

Precautions

Tridihexethyl chloride: Use cautiously in elderly males (possible prostatic hypertrophy).

Meprobamate: Carefully supervise dose and amounts prescribed. Consider possible dependence or habituation (reported occasionally after excessive use), particularly in severe psychoneurotics, alcoholics, ex-addicts. Withdraw gradually (one or two weeks) after excessive dosage for weeks or months to avoid recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching; rarely, epileptiform seizures, more likely in those with CNS damage or latent convulsive disorders). If drowsiness or visual disturbance occurs, reduce dose and advise against activity requiring alertness (driving, machinery operation). Effects of excess alcohol may be increased. Grand mal seizures possible in persons with both petit and grand mal. Prescribe cautiously in small amounts to patients with suicidal tendencies. Prescribe with caution to patients with known sensitivity to compounds of similar chemical structure, e.g., carisoprodol.

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Tridihexethyl chloride: Severe effects rare on recommended dosage. Anticholinergic effects: dry mouth (fairly frequent at oral doses of 100 mg.), constipation or "bloated" feeling. Possible: tachycardia, dilation of pupils, increased ocular tension, weakness, nausea, vomiting, headache, drowsiness, urinary hesitancy or retention, dizziness.

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Suicidal attempts may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Excessive dosage has led rapidly to sleep, then reduction of vital signs to basal levels. Empty stomach, and if respiration becomes very shallow and slow, cautiously give CNS stimulants (e.g., caffeine, pentylenetetrazol, amphetamine); also pressor amines if indicated.

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Before prescribing, consult package circular.

References

1. Harrison, T. R., et al.: Principles of Internal Medicine, Fifth Edition, New York, The Blakiston Division, McGraw-Hill Book Company, 1966, p. 1019. 2. Bockus, H. L.: Gastroenterology, Second Edition, Philadelphia & London, W. B. Saunders Company, 1964, Vol. II, p. 729 et seq.

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

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AUGUST COVER

The spelunker views a companion and the sky above through many feet of clear, sparkling, unpolluted water; a gateway to millions of years of Florida history, and a challenge to us to preserve a future. Thanks to Robert Friedman for the cover picture.—Ed.

"I'm sick of spinning"



When vertigo began, her life took a turn for the worse.
Either she spins and the room stands still,
or the other way around... and around and around.
Even when she lies down, the spinning
continues. Sometimes there's nausea and vomiting, too.
It's just one thing after another.

You can help stop the spin with

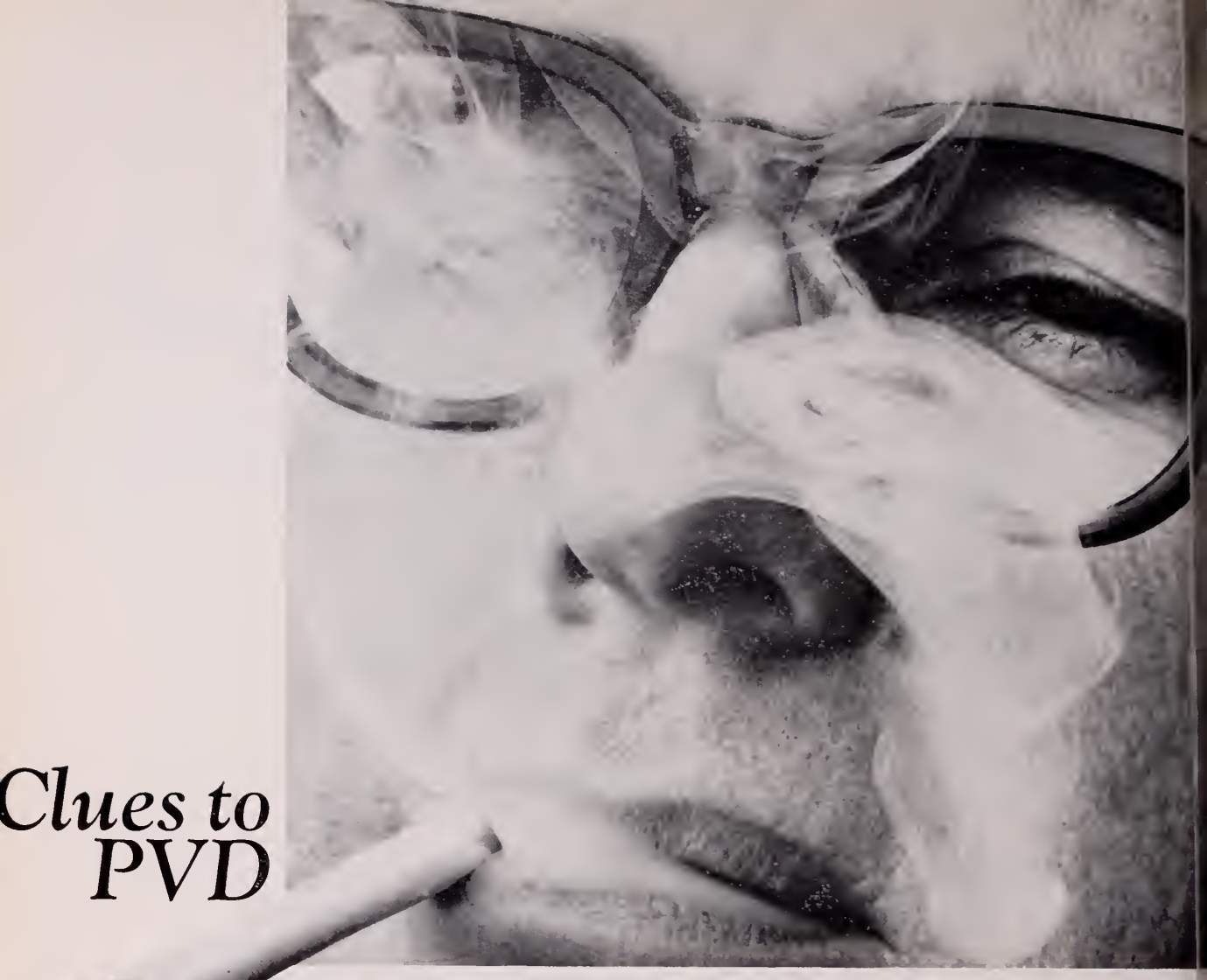
BONINE®

(MECLIZINE HCl)

Bonine protects most patients against vertigo and nausea up to 24 hours with a single dose. Pleasant-tasting Bonine tablets are chewable and can be taken anytime, anywhere, without water. In difficult cases, multiple daily doses may be necessary for maximum response.

Precautions: Although the incidence of drowsiness and atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. *Use in women of childbearing age:* In weighing potential benefits vs. risk in women of childbearing age, consider the fact that a review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum.
Supply: 25 mg. scored tablets.
More detailed professional information available on request.

Pfizer
LABORATORIES DIVISION
New York, N.Y. 10017



Clues to PVD

The heavy smoker with vasospasm

He may be comparatively young or approaching middle age. Typically, he is a heavy cigarette smoker—a pack or more a day for a number of years. Whether smoking is a causative or an important exacerbating factor in peripheral vascular disease is still under discussion. But the vasoconstrictive effects of nicotine are firmly supported by a substantial body of laboratory and clinical evidence, and the close association is now generally accepted.

Thus, a history of heavy smoking coupled with vasospasm may serve as warning signals to the physician. When a diagnosis is established, therapeutic measures are directed toward increasing the local circulation, and appropriate management of the patient's general medical needs should be instituted. These include the important safeguards of keeping warm and refraining from smoking.

Before prescribing Roniacol Timespan (nicotinyl alcohol tartrate), please consult complete product information, a summary of which follows.

Indications: Conditions associated with deficien circulation; *e.g.*, peripheral vascular disease, vascular spasm, varicose ulcers, decubital ulcers, chilblains, Meniere's syndrome and vertigo.

Caution: Roche Laboratories endorses caution in the administration of any therapeutic agent to pregnant patients.

Side Effects: Transient flushing, gastric disturbances, minor skin rashes and allergies ma occur in some patients, seldom requiring discontinuation of the drug.

Dosage: 1 or 2 Timespan Tablets morning and night.

How Supplied: Timespan Tablets—150 mg nicotinyl alcohol in the form of the tartrate salt —bottles of 50.

ROCHE
Roche
LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Important in total management of peripheral vascular disease, vascular spasm or chilblains

Roniacol® Timespan®

(nicotinyl alcohol tartrate)

for relief of ischemic symptoms

Convenience of b.i.d. dosage—sustained-release Timespan Tablets usually provide prolonged relief of ischemic symptoms with two doses daily.

Smoothness of onset—the action of Roniacol (nicotinyl alcohol) is smooth and gradual in onset, rarely causing severe flushing.

Selectivity of action—relaxes the musculature of peripheral blood vessels.

High degree of safety—side effects seldom require discontinuation of therapy.

Mild ulcerative colitis may be triggered here...



In mild ulcerative colitis, a number of factors can precipitate an attack: for instance, dietary indiscretion, such as eating raw foods, or emotional overreaction, such as that aroused by financial difficulties. No matter what causes the patient's sensitive colon to "act up," he soon suffers from acute discomfort...and often, from anxiety and apprehension as well. Such patients frequently respond well to adjunctive dual-action Librax® therapy.

Librax combines, in a single convenient capsule, the well-known antianxiety effect of Librium® (chlordiazepoxide HCl) and the dependable anticholinergic /antispasmodic effect of Quarzan® (clidinium Br). Therefore, as Librax helps to relieve the patient's excessive anxiety and reduce his overreaction to stress, it also, at the same time, helps to control hypersecretion and hypermotility, thus relieving spasm and abdominal discomfort.

With Librax, the dosage schedule is simple: 1 or 2 capsules, t.i.d. or q.i.d., will in most cases bring the patient significant relief of both the emotional and physical elements that contribute to his psychovisceral disorder.

Before prescribing, please consult complete product information, a summary of which follows.

INDICATIONS: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

CONTRAINDICATIONS: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide HCl and/or clidinium bromide.

WARNINGS: Caution patients about possible combined effects with alcohol and other C depressants. As with all CNS-acting drugs, c tion patients against hazardous occupations quiring complete mental alertness (*e.g.*, operati machinery, driving). Though physical and p chological dependence have rarely been report on recommended doses, use caution in a ministering Librium (chlordiazepoxide hydr chloride) to known addiction-prone individu or those who might increase dosage; withdraw symptoms (including convulsions), followi discontinuation of the drug and similar to th seen with barbiturates, have been reported. U of any drug in pregnancy, lactation, or in wom of childbearing age requires that its potent benefits be weighed against its possible hazar As with all anticholinergic drugs, an inhibiti effect on lactation may occur.

PRECAUTIONS: In elderly and debilitate limit dosage to smallest effective amount to pr clude development of ataxia, oversedation confusion (not more than two capsules per d initially; increase gradually as needed and tole

or here.



ted). Though generally not recommended, if ombination therapy with other psychotropics eems indicated, carefully consider individual harmacologic effects, particularly in use of po- entiating drugs such as MAO inhibitors and henothiazines. Observe usual precautions in resence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimula- ion and acute rage) have been reported in psy- hiatric patients. Employ usual precautions in reatment of anxiety states with evidence of im- ending depression; suicidal tendencies may be resent and protective measures necessary. Vari- ble effects on blood coagulation have been eported very rarely in patients receiving the rug and oral anticoagulants; causal relation- hip has not been established clinically.

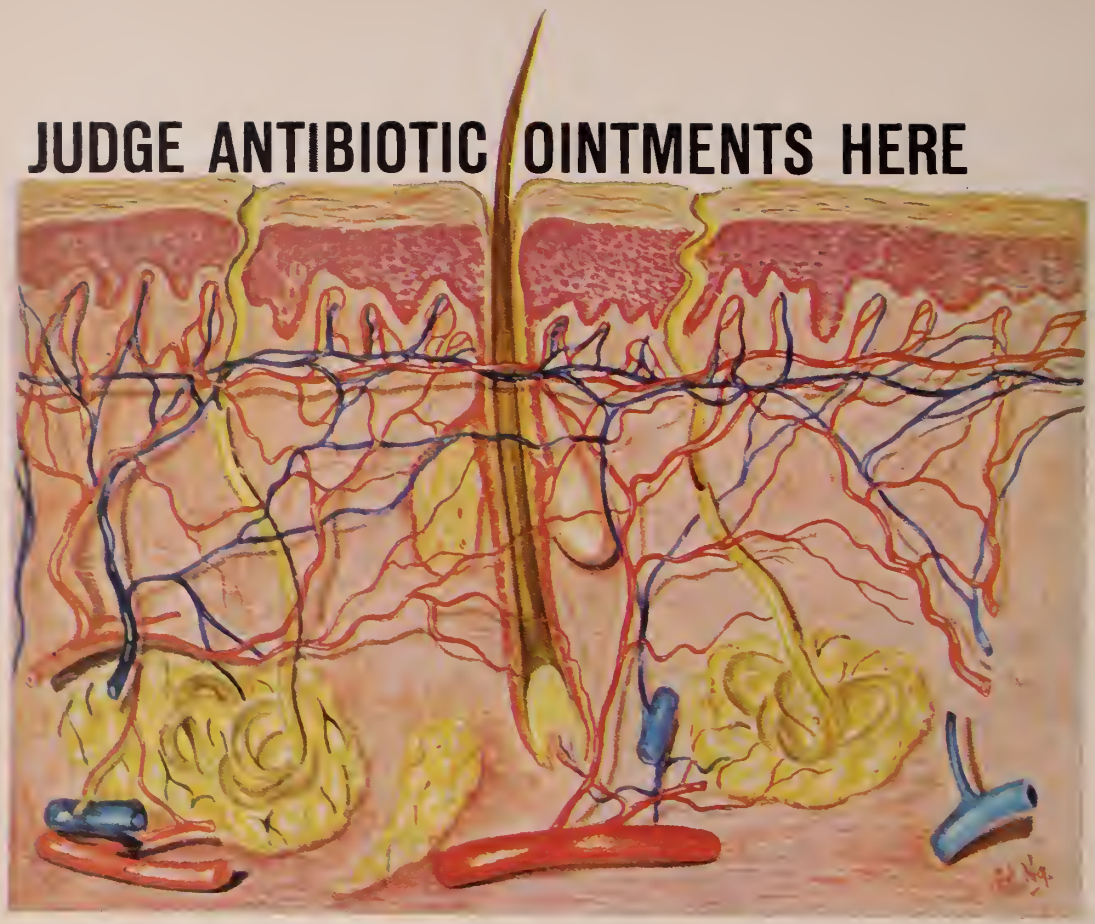
ADVERSE REACTIONS: No side effects or manifestations not seen with either compound lone have been reported with Librax. When hlordiazepoxide hydrochloride is used alone, rowsiness, ataxia and confusion may occur, specially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver-function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diet.

two good reasons for prescribing LIBRAX®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

JUDGE ANTIBIOTIC OINTMENTS HERE



Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.



Florida and The AMA

The American Medical Association convention in New York City will be completed before this page is printed and a great many subjects of vital interest to all of us were discussed. Our delegates to the AMA are Dr. Jere W. Annis, Dr. Reuben B. Chrisman Jr., Dr. Burns A. Dobbins, Dr. Francis T. Holland and Dr. Robert E. Zellner. Florida can well be proud of these men because they are knowledgeable and respected. Our delegates are expected by FMA to represent us well and to carry out the instructions of our House of Delegates. They will report to us all of the important actions of the AMA, especially those which will affect us in Florida.

Florida has had two outstanding AMA presidents and FMA is quite proud of their records.

Dr. Louis M. Orr, of Orlando, was president of AMA in 1959-1960. He was a vigorous leader during as turbulent times as the present. Many of us feel that Louis' extremely hard work and taxing schedules contributed to his death at age 61 from a heart attack (May 23, 1961). Louis Orr will always be remembered in Florida for his contributions and for his unremitting fight for our way of life.

We can also be very proud of Dr. Edward R. Annis of Miami, who was president of AMA in 1963-1964. Can anyone forget what he did for American medicine? Can anyone forget his national debates and speeches in our behalf? He is a brilliant champion, articulate and well informed. Dr. Annis, who is very much alive, will not be a candidate this year for the Board of Trustees of the AMA. Our Board of Governors and our House of Delegates as well as his "home" society, the Dade County Medical Association, have all endorsed him strongly but he has decided not to be a candidate. We need men like Ed Annis to represent medicine in the public forums as well as in our own professional meetings. I hope that he will do as he says in a recent letter to me:

". . . I assure you that I shall continue to work for the best interests of our medical profession whenever possible, and I stand ready to assist you or any other member of Florida medicine whenever you feel I may be of assistance. . . ."

Henry J. Babenaugh Jr.

A specific solution for tinea versicolor

Although tinea versicolor is not a serious disease it is chronic and recurrent and specific treatment is cosmetically important. "Of the wide variety of compounds recommended for the treatment of tinea versicolor, sodium thiosulphate still remains the standard."* However, when sodium thiosulfate is administered alone it decomposes rapidly and produces an offensive odor. These disadvantages have been largely eliminated by the development of TINVER Lotion, which contains sodium thiosulfate and salicylic acid in MICEL A® base.†

TINVER—the likable lotion for tinea versicolor—is clinically effective, cosmetically acceptable, and easy to apply. It produces rapid, visible improvement without the objectionable features of oily pastes and odorous solutions. Patient acceptability encourages continued therapy without interruption. TINVER is practical and economical for long-term therapy.

Indications: For topical use in the treatment of tinea versicolor.

Precautions: If signs of irritation or sensitivity develop, discontinue use. Do not use on or about the eyes.

Dosage and Administration: Thoroughly wash, rinse, and dry the affected area before applying medication. Apply a thin film of the lotion twice a day, or as directed. Although diagnostic evidence of the tinea versicolor may disappear in a few days, it is advisable to continue treatment for a much longer period. Clothing should be boiled to prevent reinfection.

Supply: 5 oz. polyethylene squeeze bottle.



*McClarin, W. M., and Knox, J. M.: Cutis 3:619 (June) 1967.

†The MICEL A® base is a thixotropic gel of colloidal alumina with unique compounding properties. The base dries to an invisible film that holds ingredients on the skin without powdering or flaking.

Tinver® Lotion

Sodium thiosulfate USP 25%, salicylic acid USP 1%, isopropyl alcohol NF 10%, and propylene glycol USP, in a MICEL A base of menthol USP, disodium edetate, colloidal alumina, and purified water USP.

BARNES-HIND LABORATORIES

Subsidiary of Barnes-Hind Pharmaceuticals, Inc.
Sunnyvale, Calif. 94086



Treating vaginitis is as easy as AVC

Trichomonads...Monilia...Bacteria

You can depend on AVC—the comprehensive therapy that acts against all three major vaginal pathogens.

Monilia emerging as a major therapeutic problem—
recent studies report increased incidence, attributed in part to the use of oral contraceptives,[1-4] broad-spectrum antibiotics[5-9] and prolonged use of corticosteroids.[7]
recent evidence establishes high rate of microbiological and clinical cure with AVC.[9-11]

Comprehensive—Effective

The published record and more than two decades of clinical experience clearly establish the therapeutic value of AVC in vaginitis/cervicitis and vaginal surgery.

Easy as AVC

Contraindications: Known sensitivity to sulfonamides.
Precautions/Adverse Reactions: The usual precautions for topical and systemic sulfonomides should be observed because of the possibility of absorption. Burning, increased local discomfort, skin rash, urticaria or other manifestations of sulfonamide toxicity are reasons to discontinue treatment.
Dosage: One applicatorful or one suppository intravaginally once or twice daily.
Supplied: Cream—Four-ounce tube with or without applicator. Suppositories—Box of 12 with applicator.

References: 1. Gardner, H. L.: J. Miss. M.A. 8:529, 1967. 2. Porter, P. S., and Lyle, J. S.: Arch. Dermat. 93:402, 1966. 3. Walsh, H.; Hildebrandt, R. J., and Prystowsky, H.: Am. J. Obst. & Gynec. 93:904, 1965. 4. Vaginitis and the Pill: J.A.M.A. 196:731, 1966. 5. Guerriera, W. F.: South. M.J. 56:390, 1963. 6. Seelig, M. S.: Am. J. Med. 40:887, 1966. 7. To-day's Drugs, New York, Grune & Stratton, Inc., 1965, p. 316. 8. Gray, L. A., and Barnes, M. L.: Am. J. Obst. & Gynec. 92:125, 1965. 9. Solerno, L. J.; Ortiz, G., and Turkel, V.: Vaginitis: A Diagnostic and Therapeutic Approach, Scientific Exhibit, presented at the 115th Annual A.M.A. Convention, Chicago, Illinois, June 1966. 10. Walsh, J. C.; Sheffery, J. B., and Wilson, T. A.: Med. Ann. D.C. 37:358, 1968. 11. Nugent, F. B., and Myers, J. E.: Pennsylvania Med. 69:44, 1966.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

AVC CREAM (aminacrine hydrochloride 0.2%, sulfonilamide 15.0%, allantoin 2.0%)

AVC SUPPOSITORIES (aminacrine hydrochloride 0.014 Gm., sulfonilamide 1.05 Gm., allantoin 0.014 Gm.)

TRADEMARK: A V C

AV-919A 7/69

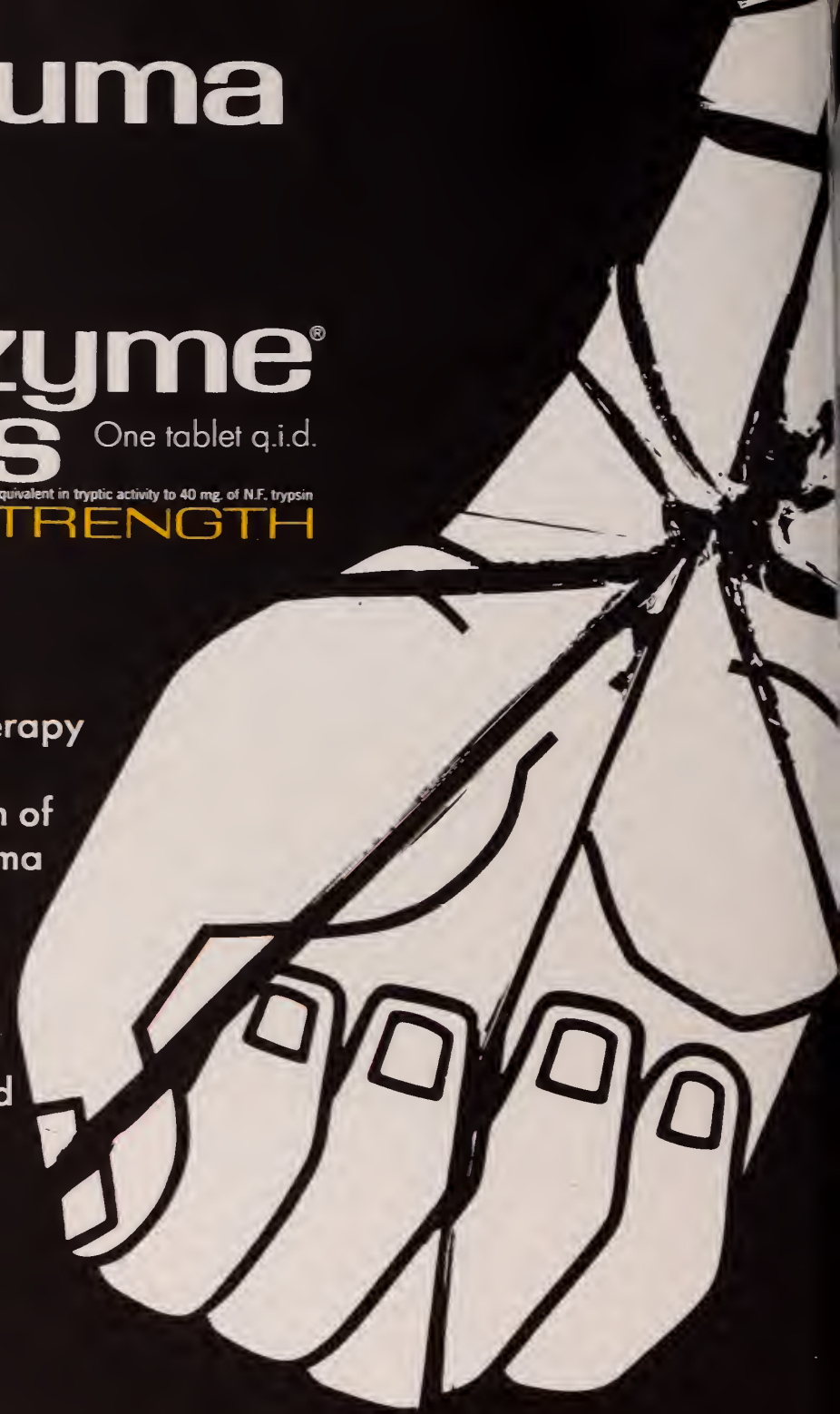
in trauma

new Orenzyme® Bitabs

One tablet q.i.d.

Trypsin: 100,000 N.F. Units, Chymotrypsin: 8,000 N.F. Units.; equivalent in tryptic activity to 40 mg. of N.F. trypsin

DOUBLE STRENGTH



Proteolytic enzyme therapy specifically indicated for the rapid resolution of inflammation and edema as adjunctive therapy in accidental and surgical trauma.

1 tablet q.i.d. provides recommended therapeutic dose at lower cost.

A FULL DAY'S DOSAGE

Description: ORENZYME BITABS offers the therapeutic effects of trypsin in an oral form as adjunctive therapy for the rapid resolution of inflammation and edema. ORENZYME BITABS is convenient to use, promotes patient cooperation and is ideally suited for maintenance therapy following parenteral trypsin.

Indications: When used as adjunctive therapy for the rapid resolution of inflammation and edema, good results have been obtained in:

- ☐ Accidental Trauma
- ☐ Postoperative Tissue Reactions.

Other conventional measures of treatment should be used as indicated. In infection, appropriate anti-infective therapy should be given.

Contraindications: ORENZYME BITABS should not be given to patients with a known sensitivity to trypsin or chymotrypsin.

Precautions: It should be used with caution in patients with abnormality of the blood clotting mechanism such as hemophilia, or with severe hepatic or renal disease. Safe use in pregnancy has not been established.

Adverse Reactions: Adverse reactions with ORENZYME have been reported infrequently. Reports include allergic manifestations (rash, urticaria, itching), gastrointestinal upset and increased speed of dissolution of animal-origin surgical sutures. There have been isolated reports of anaphylactic shock, albuminuria and hematuria. Increased tendency to bleed has also been reported but, in controlled studies, it has been seen with equal incidence in placebo-treated groups. (See Precautions.) It is recommended that if side effects occur medication be discontinued.

Dosage: One tablet q.i.d.

THE NATIONAL DRUG COMPANY
DIVISION OF RICHARDSON-MERRELL INC.
PHILADELPHIA, PENNSYLVANIA 19144

TRADEMARK: BITABS U.S. PATENT NO. 3,004,893 4/69 0-821A



In Gastritis

Also available as Estomul Tablets:

Each swallow tablet contains: orphenadrine hydrochloride, 25 mg.; bismuth aluminate, 25 mg.; magnesium oxide, 45 mg.; aluminum hydroxide-magnesium carbonate (as co-precipitate), 500 mg.

Indications: Peptic ulcer: duodenal, marginal, gastric, esophageal; gastroesophageal reflux; esophagitis (without stricture); irritable bowel syndrome; hyperacidity and dyspepsia; congenital shortening of esophagus with esophagitis; heartburn; spasm of the cardiac end of esophagus; gastritis; symptomatic hiatus hernia; alcoholic gastritis; functional pylorospasm.

Contraindications: Because of the anticholinergic action of orphenadrine, Estomul should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia (megaesophagus), and myasthenia gravis.

Precautions: Doses in excess of six tablets or six tablespoons of liquid daily may produce minor side actions such as dryness of the mouth or blurred vision.

Warning: Use of any drug in pregnancy, lactation or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother and child. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Side Effects: Possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Dosage: For adults: One or two tablespoons of liquid or one or two swallow tablets three times daily; depending on severity.

Availability: On Rx only. 12 oz. bottles of liquid and bottles of 100 swallow tablets.

anticholinergic
antacid
demulcent
topical anesthetic

it's all here!

Estomul®
Liquid

Each tablespoon (15 cc.) contains:
orphenadrine HCl, 25 mg.;
bismuth aluminate, 50 mg.;
aluminum hydroxide—magnesium carbonate
(as co-precipitate), 918 mg.

Riker Laboratories • Northridge, California 91324

The Riker Representatives in your area are: Harold Hoblick, Guy Colon, Jim Crozier, Walt Crow, Rick Giteles, Billy Phillips

Convalescing . . . but still a long way to go. Anxiety can make it even longer.

Convalescence following medical or surgical procedures may be almost endless to an anxious patient. And, indeed, anxiety with some patients actually retards progress—for example, by inducing insomnia and reducing cooperation.

As physicians have found during nearly 15 years of widespread use, Equanil may be a beneficial part of aftercare. It helps relieve anxiety and tension, thus often aiding your primary therapy.

Indications: For use in management of anxiety and tension occurring alone or as accompanying symptom complex to medical and surgical disorders and procedures. Though not a hypnotic, fosters normal sleep through antianxiety and related muscle-relaxant properties.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

EQUANIL®
(meprobamate)

Wyeth

Wyeth Laboratories Philadelphia, Pa.

Photo professionally posed.



Description: FLUOGEN (Influenza Virus Vaccine, Bivalent, Ether Extracted Antigen) (Types A_2 and B) is composed of the antigen of the strains of influenza viruses recommended by the Division of Biologics Standards, National Institutes of Health, Public Health Service. It is formulated to contain 400 CCA (chick cell agglutination) units of extracted immunizing antigen of type A_2/Aichi/2/68 strain (Hong Kong variant) and 300 CCA units of extracted immunizing antigen of B/Massachusetts/3/66 strain for a total of not less than 700 CCA units per each 0.5 cc. dose. **Method of Preparation:** The influenza viruses are propagated on developing chick embryos. The extra-embryonic fluid containing the virus suspension is harvested, clarified by filtration and concentrated and refined by ultracentrifugation. Polysorbate-80, U.S.P. (175 mcg. per 0.5 cc.) is added to the refined concentrate. The refined concentrate is extracted with ethyl ether, stabilized with formalin, and preserved with 0.01% thimerosal (mercury derivative). The vaccine contains not more than 1:12,000 formalin, used during the process. It does not contain penicillin. Aluminum phosphate, 1.5 mg. per 0.5 ml. is added to the vaccine as an adjuvant. **Indications:** FLUOGEN is indicated for the production of immunity to influenza produced by the strains of virus containing antigens related to those in the vaccine. FLUOGEN is recommended primarily as a seasonal booster for persons who were previously vaccinated with vaccines containing the A_2 Hong Kong variant. It may also be used for primary immunization of those who have not previously received the Hong Kong variant. It is recommended that both primary and booster immunization be completed by early December since influenza is more likely to appear during cold weather. It is understood that should epidemic conditions be predicted, immunization procedures should be initiated regardless of the time of year. Attempts to produce immunity following the appearance of an epidemic may be less successful because of the rapidity with which the disease spreads and the time required for antibody production following vaccination. The degree of protection afforded by immunization with any vaccine may not be sufficient to prevent the disease if the exposure to the influenza virus strains is overwhelming or if the virus strains are not closely related antigenically to those used in the production of vaccine. Although routine vaccination of healthy groups of adults and children is not recommended, when widespread epidemics of influenza are forecast, vaccination may be considered if above-average levels of absenteeism would disrupt satisfactory operations in industries, schools, and other such groups. **Contraindications:** The use of products prepared from the embryonic fluid of chicken eggs is contraindicated in persons with a history of allergy to eggs, chicken, chicken feathers, or chicken dander. In persons suspected of having an allergic condition, immunization procedures should be preceded by a scratch test or an intradermal injection (0.05 ml. to 0.1 ml.) of vaccine diluted 1:100 in sterile saline to determine possible sensitivity to the minute residual egg protein that may be present in the vaccine. A positive skin reaction contraindicates immunization with the vaccine. Immunization should be deferred in the presence of any acute respiratory disease or other active infection. It should also be deferred in the presence of an epidemic of poliomyelitis unless the risk of influenza represents a greater threat to the patient than the increased possibility of poliomyelitis. **Precautions:** A separate sterile syringe and needle should be used for each patient to prevent transmission of homologous serum hepatitis virus or other infectious agent from one person to another. Reusable glass syringes and needles should be heat sterilized. Epinephrine should be immediately available for use should an acute anaphylactoid reaction occur in individuals having an undisclosed hypersensitivity to any component of the vaccine. Because of the possibility of a febrile reaction following immunization with influenza virus vaccine, the wisdom of attempting to immunize patients with a history of febrile convulsion should be given careful consideration. **Adverse reactions:** Most frequent reaction reported in early clinical studies† with ether-extracted vaccine was tenderness at the site of injection. Headache and malaise were reported in up to about 12% of subjects. Nausea and fever occurred in approximately 5% of the patients. Muscle ache, joint pain, chills, fatigue, and anorexia occurred in less than 5% of the subjects. **Package information:** Bio 579—5 cc. rubber-diaphragm-capped vial. Each 5 cc. vial contains sufficient vaccine to deliver ten 0.5 cc. doses.

†Unpublished data available upon request.

Parke, Davis & Company, Detroit, Michigan 48232 69469

new FLUOGEN™ (influenza virus vaccine, bivalent) immunizing antigen, ether extracted

"Purified" flu vaccine is tidy and homogeneous... but that's just the starting material for FLUOGEN.

First, we ether-extract our viruses—stripping away a lot of reaction-causing lipids and egg protein in the process.

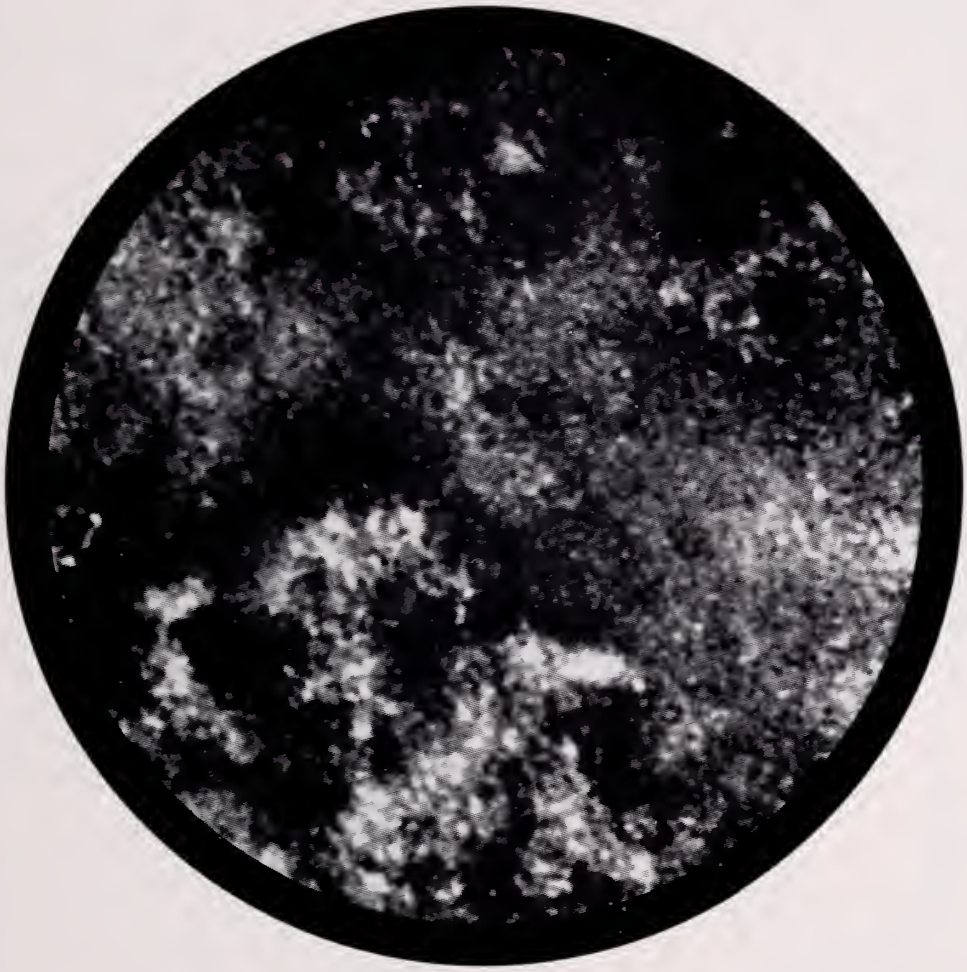
Then we scrub off more troublemaker with our exclusive gel filtration proces

Result: An ultrapure antigen, with the adult dose reduced to 0.5 cc. With this dose, antibody levels are equal or superior to those provided by our conventional influenza virus vaccines but FLUOGEN is **only slightly more than half as likely to cause side effects.***

JE

PARKE-DAVIS

we had to take our conventional flu vaccine two steps beyond "purified" to make it look like this...



...and cut its side effects almost in half



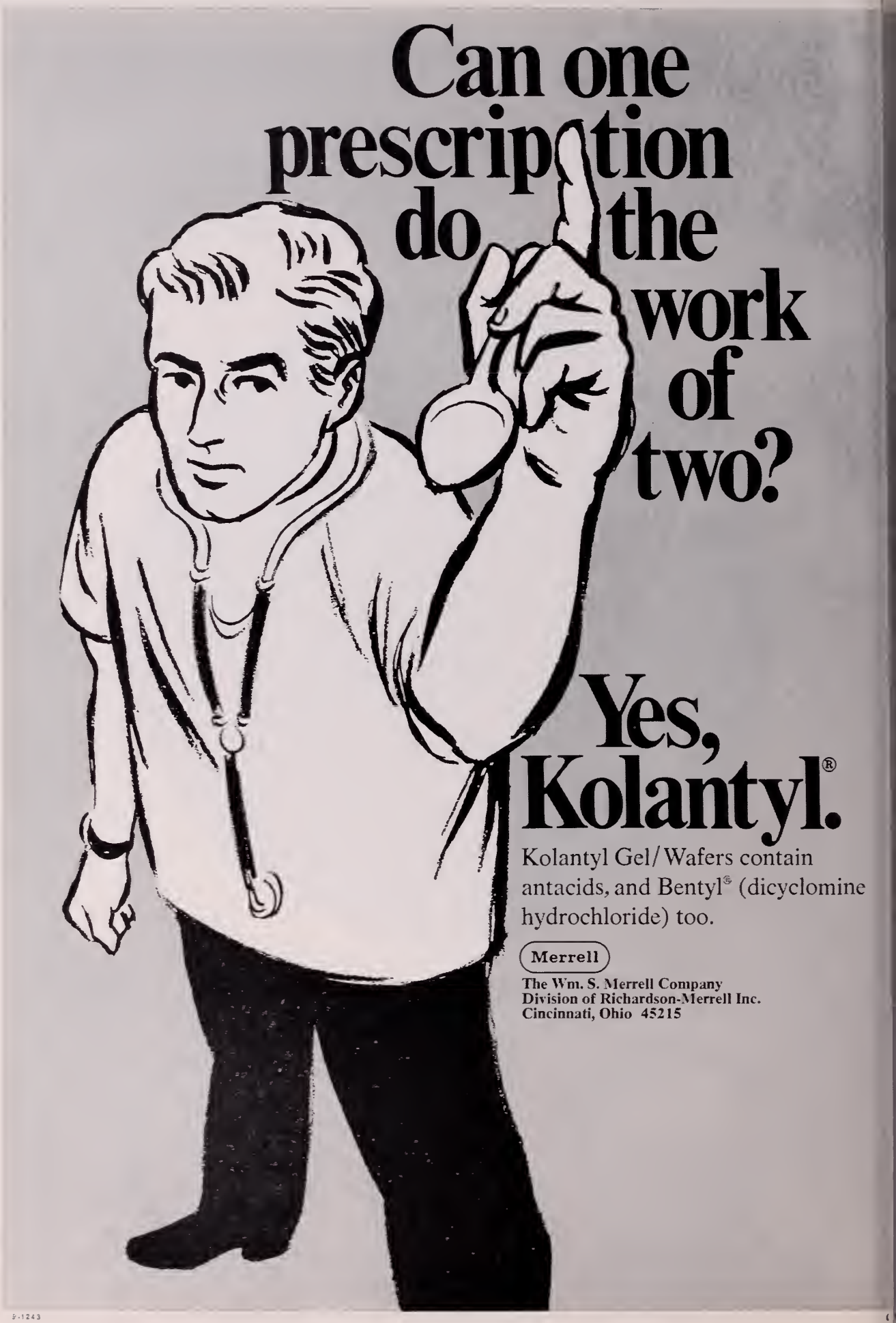
with conventional vaccine

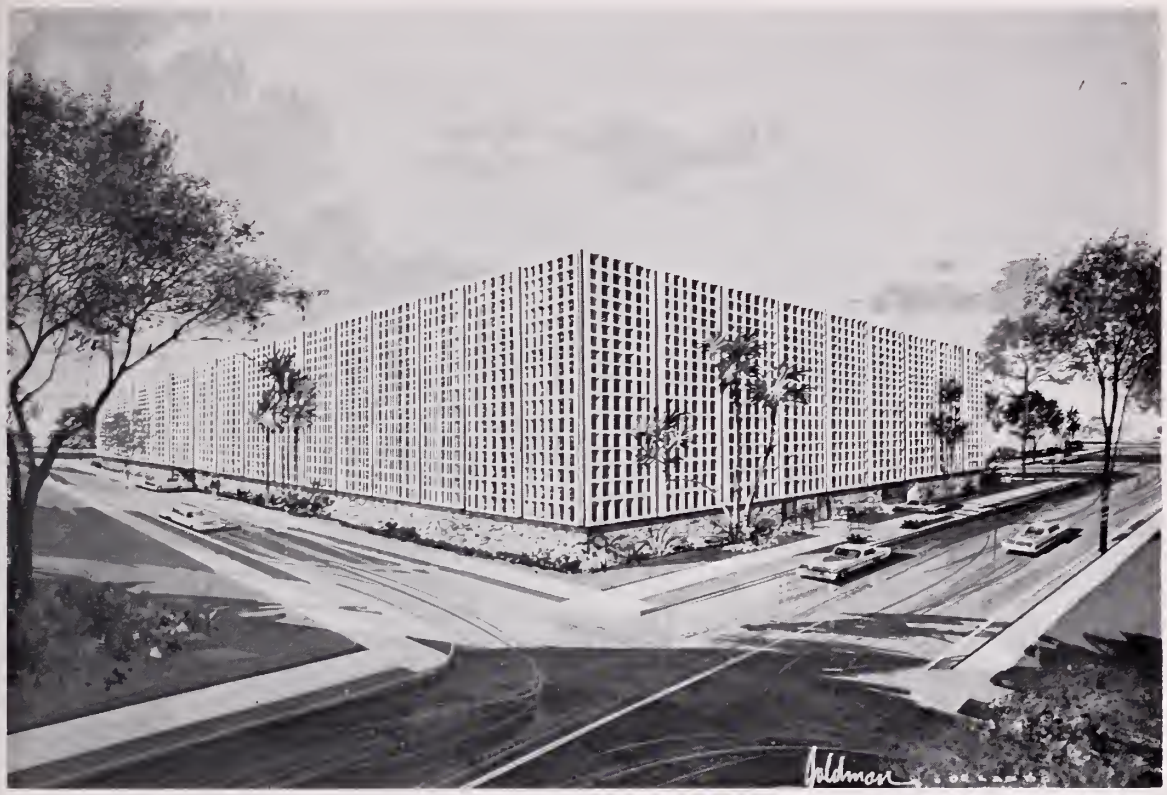
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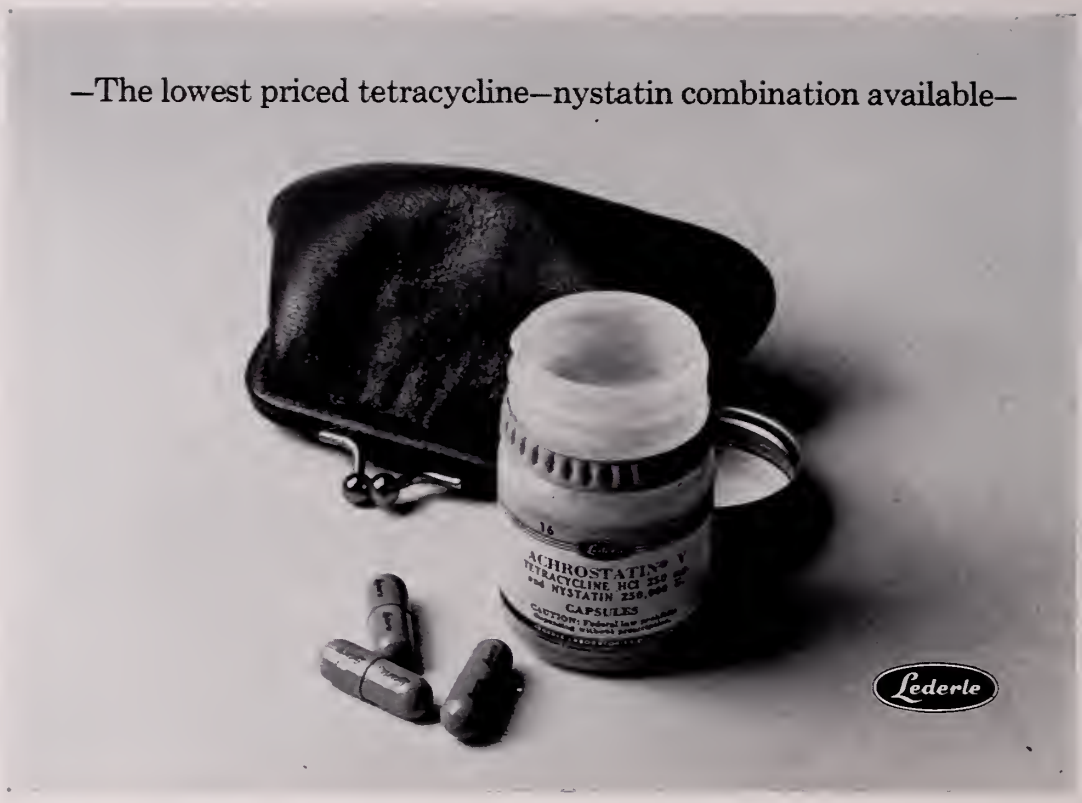
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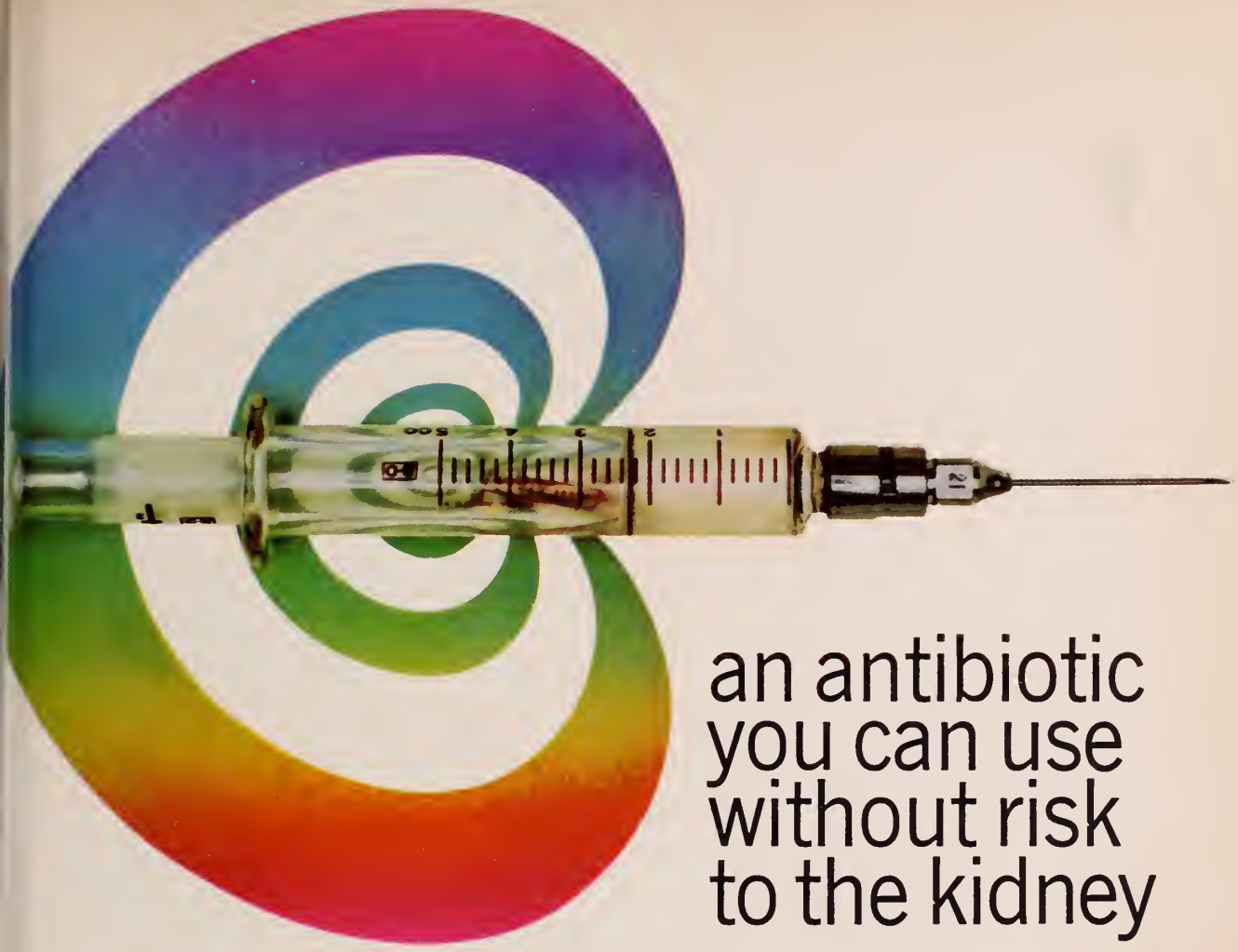
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Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. There is no accepted proof that Flagyl is effective against other organisms and it should not be used in the treatment of other conditions. Exacerbation of moniliasis may occur.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, constipation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, drowsiness, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, weak-

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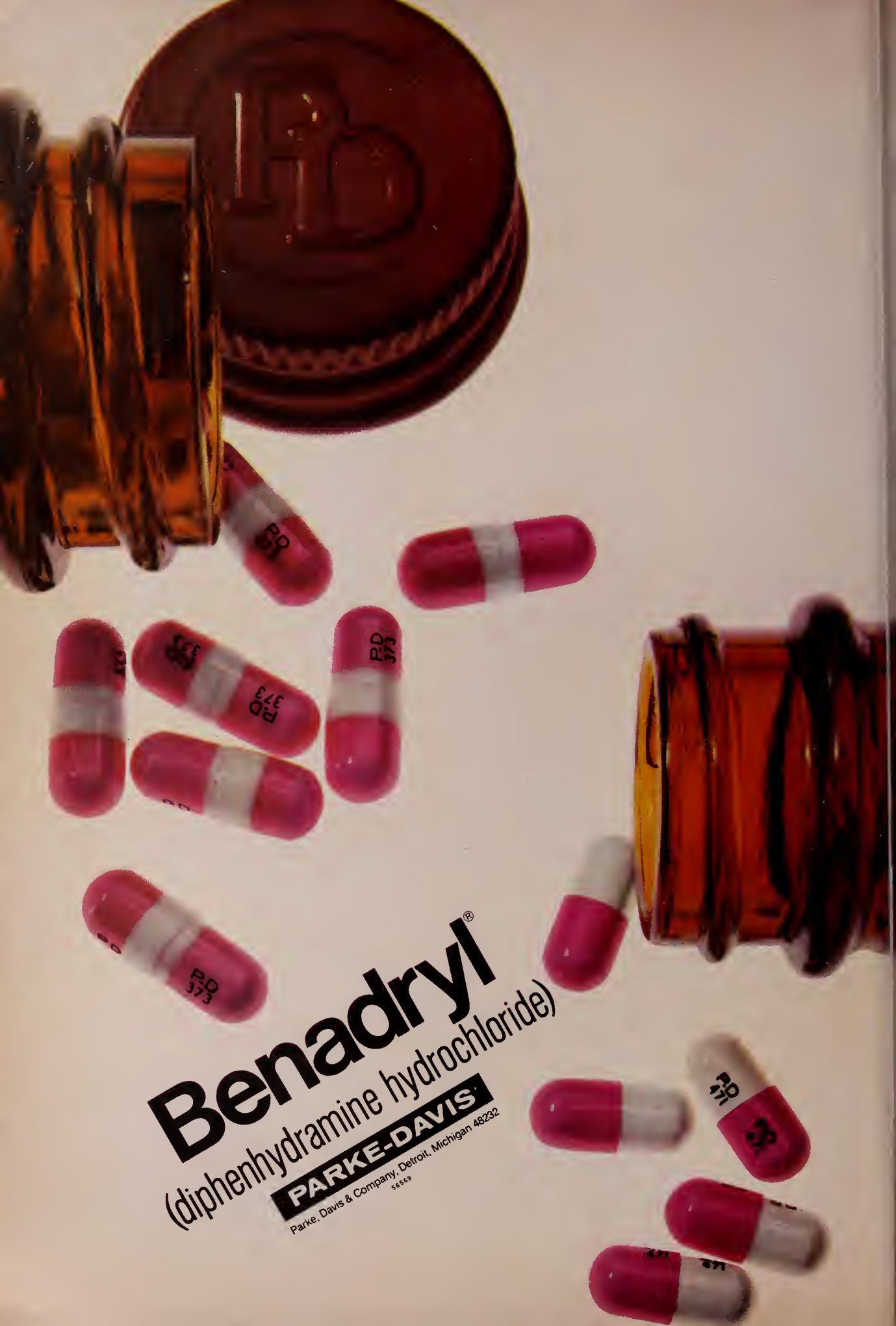
ness," urticaria, flushing, dryness of the mouth, vagina or vulva, vaginal burning, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified

Dosage and Administration: In the Female. One 250-mg. tablet orally three times daily for ten days. Courses may be repeated if required in especially stubborn cases; in such patients an interval of four to six weeks between courses and total and differential leukocyte counts before, during and after treatment are recommended. Vaginal inserts of 500 mg. are available for use, particularly in stubborn cases. *When the vaginal inserts are used,* one 500-mg. insert is placed high in the vaginal vault each day for ten days and the *oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment.* Do not use the vaginal inserts as the *sole* form of therapy. *In the Male.* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

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Florida Medical | editorial

Our Annual Meeting

Clyde M. Collins, M.D.

If the discussion among other delegates returning from the 95th annual meeting of the Florida Medical Association is similar to that brought back by the delegates from Duval County, then a resolution to shorten the second session of the House of Delegates would obtain unanimous support. For, in spite of pleas, recommendations, resolutions and good intentions made in 1968 to expedite second session activities, this year the proceedings of the second session began Sunday morning at 8:30 and dragged on and on until almost 3:00 p.m., with no recess.

Numerous suggestions on how to more rapidly move the transactions of our Association are tempered by the question, how can we provide time for needed debate, business affairs, awards and ceremonies, all in the short period of three and one-half days?

Previously having moved around from one reference committee to another to hear discussions on other than run-of-the-mill resolutions, by Sunday at the second session it was rather uninteresting to hear committee chairmen read reports followed often by something resembling a prolonged but delayed television replay of the controversial points debated previously before their committees. Having heard both sides of some questions, it seemed that some recommendations were decided on basic generalizations, erroneous statements or emotional pleas, ignoring entirely the intent of the action requested. Exasperating, too, were delegates who, not having attended the reference committee meetings, obtained the floor of the House to voice objections based on irrelevant fundamentals or points previously discussed pro and con and discarded as having no value.

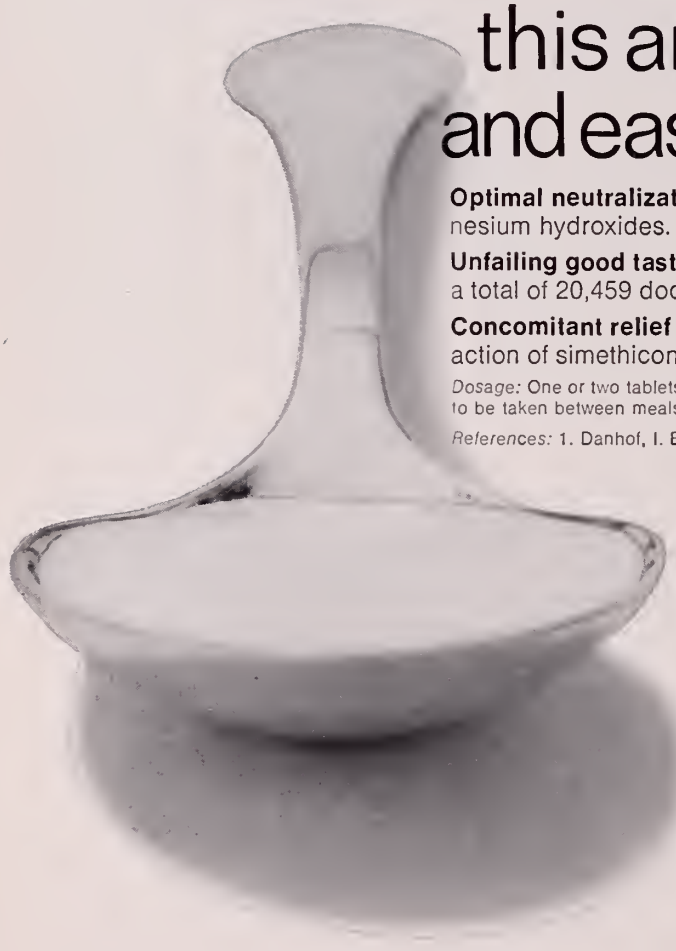
The proposal recommending the raising of FMA dues was objected to by the same long and eloquent speech which had refuted the objectives suggested at the hearing before the reference committee. Some controversial issues presented in reasonable fashion were followed by little discussion and approved without debate by the delegates. The much discussed program of providing health care to private patients by the University of Florida medical school clinic in Mayo, Lafayette County, was presented by two reference committees and voted upon with debate. One item satisfactorily resolved to the liking of all was on the question of medical ethics in a Punta Gorda hospital. The reference committee to which this had been assigned out-sat and out-lasted all others in its hearings to allow time to air the feelings of all doctors there on the ousting of a staff member of Charlotte Hospital Association. This had occurred without a stated cause, pointing out the concern of everyone present to the constant threat of hospital control on the practice of medicine. Two long resolutions presented in support of this were rewritten in a single short resolution by the committee using general terms covering the problem so adequately that, after it was passed by the House, the individual involved rose to his feet and thanked the committee, the delegates and the society for the support he was given. Osteopathy again was brought before the House of Delegates and reports of their activities in rural and urban areas were presented. It was pointed out that as medical doctors are deserting the field of general practice, in many areas there is no one else other than the D.O. to whom the public can turn.

All in all, it was for the most part, interesting and informative. It again demonstrated the democratic principles upon which our Association is organized; that no vested interests are served, that the smallest county society can send a request for help, that any local society can present its views, selfish, humanitarian or altruistic, and that any delegate can obtain the floor and state his opinions or plead his cause.

To our elected officials, the members of our full-time staff, all members of the hard working reference committees and their chairmen and to each member of the House of Delegates, should go a vote of thanks from the more than 6,000 physicians in the Florida Medical Association. □

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References: 1. Danhof, I. E.: Report on file. 2. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.

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Nameless Rivers and Sunless Corridors

William H. Hulet, M.D.

The sight of horses grazing on the gentle slope of a sparsely wooded hill at sunset is a memorable scene. Nearby, a narrow, sandy path leads down to the watering hole—a quiet pool bordered with cypress, pine and oak. Below the water's surface the upended roots and trunk of a toppled tree are vaguely discernible. The calm and stillness of the water is broken only by the splash of a startled turtle or the jump of feeding minnows.

Down low rolling hills, about a half mile to the south, is a companion scene that is strikingly different. Here, a roughly circular pool about 200 feet in diameter brims with water of remarkable clarity. The force and turbulence of the water emerging from a cavernous bottom keep the aquatic plants and grasses in continuous motion. This latter site is commonly known as Hornsby Springs and is located on the grounds of Camp Kulaqua, a youth camp belonging to the Seventh Day Adventists near the city of High Springs, Florida.[1] The discharge from the springhead flows in a northwesterly direction for about a mile and then disappears into the ground, perhaps to emerge again in the Santa Fe River which lies a short distance to the north. The springrun, a fast-moving stream carrying water away from the Springs, is densely wooded on both banks and contains an abundance of plant and animal life.

On first viewing these two scenes—the first, a quiet watering hole; and some distance away, the other, a spring-fed pool and stream—the casual observer would scarcely suspect that below the ground an immense subterranean river joins the two. But Hornsby Springs and Hornsby Sink, the latter being the watering hole, are only a small segment of the underground water system of the Florida peninsula. In order to appreciate the immensity of this most important natural resource, it will be helpful to review the geologic history and topography of the land mass we call Florida.

The Florida peninsula is part of a much larger plateau set in a sedimentary basin that extends from the eastern Gulf of Mexico out over the Atlantic to include the Bahamas and Cuba. The submerged portion of the Floridan Plateau is equally as large as the peninsular area which rises above the sea. On the Gulf side of the Florida peninsula the plateau forms a gently sloping continental shelf that extends out more than a hundred miles from land. The narrowest border of the Floridan Plateau occurs on the Atlantic side off the coast of Palm Beach, Broward and Dade counties, and deep water is found a short distance offshore.

Florida in pre-Cambrian times (Fig. 1) was the site of volcanic mountains which eventually sunk into the earth's crust to be covered in 500 million years with layers of sediment a mile or more in thickness over the entire peninsula.[2,3,4] With the wearing and submergence of ancient volcanoes, the peninsula became the repository for an accumulation of marine and estuarine sediment. As testimony to its submergence below the sea, the Ordovician quartzitic sandstone and shale layered on top of the lava beds contain the fossil remains of the trilobite, a crablike animal that dominated the sea floor 400 million years ago.

More cogent to the present discussion is the formation of the Floridan Plateau and the development of the network of the underground caverns and rivers. Major building of the Floridan Plateau began 135 million years ago in the Cretaceous

From the departments of medicine and physiology, University of Miami School of Medicine and the medical service, Veterans Administration Hospital, Miami.

Dr. Hulet is professor of medicine and physiology and chief, division of medical marine science, University of Miami School of Medicine, Miami.

ERA	PERIOD	EPOCH	BEGINNING DATE
TACHYZOIC (swift life)	QUATERNARY	RECENT	20,000 B.C.
		PLEISTOCENE	1*
CENOZOIC (new life)	TERTIARY	PLIOCENE	12*
		MIOCENE	28
		OLIGOCENE	39
		EOCENE	58
		PALEOCENE	75
MESOZOIC (middle life)	CRETACEOUS		135*
	JURASSIC		165
	TRIASSIC		205
PALEOZOIC (ancient life)	PERMIAN		230*
	CARBONIFEROUS		280
	DEVONIAN		325
	SILURIAN		360
	ORDOVICIAN		425
	CAMBRIAN		505
PRECAMBRIAN AND AZOIC TIMES			*in millions of years ago

Fig. 1. — A geologic timetable of the earth's history.

Period. In this closing period of the Mesozoic Era, gigantic dinosaurs roamed the emerged land masses and their presence marked the zenith of reptile evolution. In the Cretaceous, the future Florida was mostly ocean floor and for nearly 100 million years it was to remain the repository of innumerable layers of calcareous sediment. Minute marine organisms with calcium carbonate shells, the Foraminifera, were principal contributors to this sedimentary deposit. In those millions of years the entire peninsula became covered with a mantle of chalk, calcareous clay and limestone, thousands of feet thick.

To the good fortune of present-day inhabitants, there is a crick in the long finger of peninsular bedrock. In the north-central part of the state, the ancient Ordovician sandstone humps up to thrust the limestone beds close to the present land surface. This upheaval is largely responsible for the development of the Northern and Central Highlands of Florida. The dome of this irregularity is in Marion County and, in geologist's parlance, it is called the Ocala Uplift.[5] In the vicinity of Ocala a pick and shovel are all that are needed to reach the Eocene limestone deposits. The Ocala limestone is a white- to cream-colored layer of calcium carbonate, 50 to 500 feet in thickness, that covers practically all of the Florida peninsula. In origin it is principally foraminiferal, but not to the exclusion of mollusk shells, sea urchin fragments and bits of coral. The attention given to the Ocala limestone and other similar deposits, such as those designated Avon Park, Suwannee, and Tampa, is well-deserved. These layers of porous rock trap, hold, transport and dispense the supply of drinking water for the entire state. Better known as aquifers, these important geologic formations are the reservoirs for Florida's springs, lakes, wells and riverbeds (Fig. 2).[6]

As rain falls on the Florida Highlands, it percolates down through the porous surface ground to reach the underground water level in the limestone bedrock. Because of its content of organic acids from decayed surface vegetation, the rainwater is slightly acidic and tends to dissolve the calcium carbonate as it permeates the bedrock. Fissures and cavities so formed become connecting

channels for a flow of water. The hydrostatic pressure of the column of water in the layers of underground bedrock is another force which promotes the dissolution of carbonate rock and enlarges the channels. The cavernous passages which today serve as aquifers for underground rivers were well along in development some 12 million years ago and in many places they are known to travel many feet below sea level. In areas of relatively high topographic relief, as in Marion, Alachua, and Levy counties, the rain water running directly into exposed surface limestone has crumbled and dissolved the bedrock, leaving behind a deep hole or sink which may or may not communicate directly with the underground aquifer.

The present sea level and height of the stable freshwater level in high ground scarcely reflect the up-and-down fluctuations of these levels that took place during glacial and inter-glacial periods of the past million years. Certainly, the water levels are higher now than they were when most of North America was covered with ice. The geologic evidence suggests that today's artesian springs were once sinkholes, and the discharge from innumerable springheads is the result of greater rainfall and higher levels of ground surface water. Most of the artesian springs discharge directly into riverbeds; but occasionally, an aquifer may descend far below sea level and discharge from the ocean floor as a submarine spring. The ocean boil off the coast of Crescent Beach is due to the upwelling of water from a submarine spring.[7]

By far, Silver Springs in Marion County is the largest and most famous of Florida's 17 first-magnitude artesian springs.[8] Water of utmost clarity pours out of underground fissures and caverns. Five major underground rivers combine to give a measurable discharge that exceeds 500 million gallons a day. The flow proceeds along Silver Run for several miles distance before it empties into the Oklawaha River.

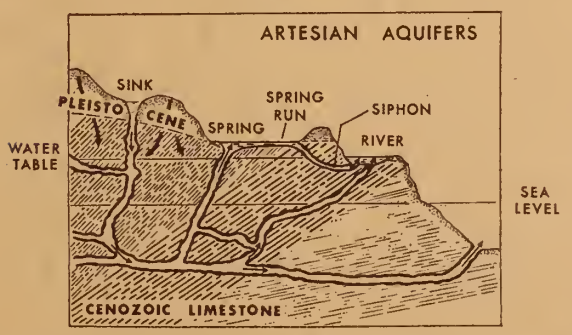


Fig. 2. — A composite drawing showing the charge and discharge areas of Florida's artesian aquifers.

Considerable comment has been given to the role of marine sediment in the formation of the Florida land mass. However, before the Pleistocene or Ice Age, most of the old limestone beds had been covered by sand, gravel and clay that washed over the peninsula from the mainland. A great influx of animals from both north and south coincided with this new period of land building. Miocene and Pliocene beds, either excavated or exposed by springs and rivers, have yielded the remains of extinct species of camel, pig, rhinoceros, horse, mastodon and numerous other smaller animals. Since the oceans previously covered the land, it is not surprising that the only fossil mammal ever found from an earlier period was the marine whale-like animal, *Basilosaurus cetoides*. The fossilized bones of this oceanic animal were discovered in Eocene deposits near Ocala. With the arrival of the Ice Age, the Florida peninsula became the refuge for animals fleeing the frigid temperatures of the northern plains. In many respects the Pleistocene fauna of Florida resemble the animals one might see today on a safari across the plains of Africa. Mastodons, mammoths, giant sloths, camels, bears, tapirs and even saber-tooth tigers mingled with the smaller animals that somehow survived the massive extinction of the large animal species that struck during Pleistocene and Recent Times.[9]

For paleomammologists, the riverbeds, springs and sinkholes of Florida are a treasure chest of teeth and bones of prehistoric animals (Fig. 3). Contrary to popular belief—a not infrequent error ascribable to learning history from motion pictures—primitive man and the dinosaur were not contemporaries. Of far greater significance, the history of man is interwoven with the evolution of the largest living terrestrial animals, the elephant.[10] True, the American mastodon, *Mammut americanum*, has left behind fossil evidence of its existence in Florida during the Pleistocene, but never in such abundant supply that every large bone or tooth can be considered of mastodon origin. The mastodon was, at best, a far distant relative of the Elephantidae and by the time of the glaciers it had arrived at an evolutionary dead end and was marked for early extinction. By contrast, it was the mammoth, the proboscidean that shared a common ancestry with living elephants, that became associated with the earliest

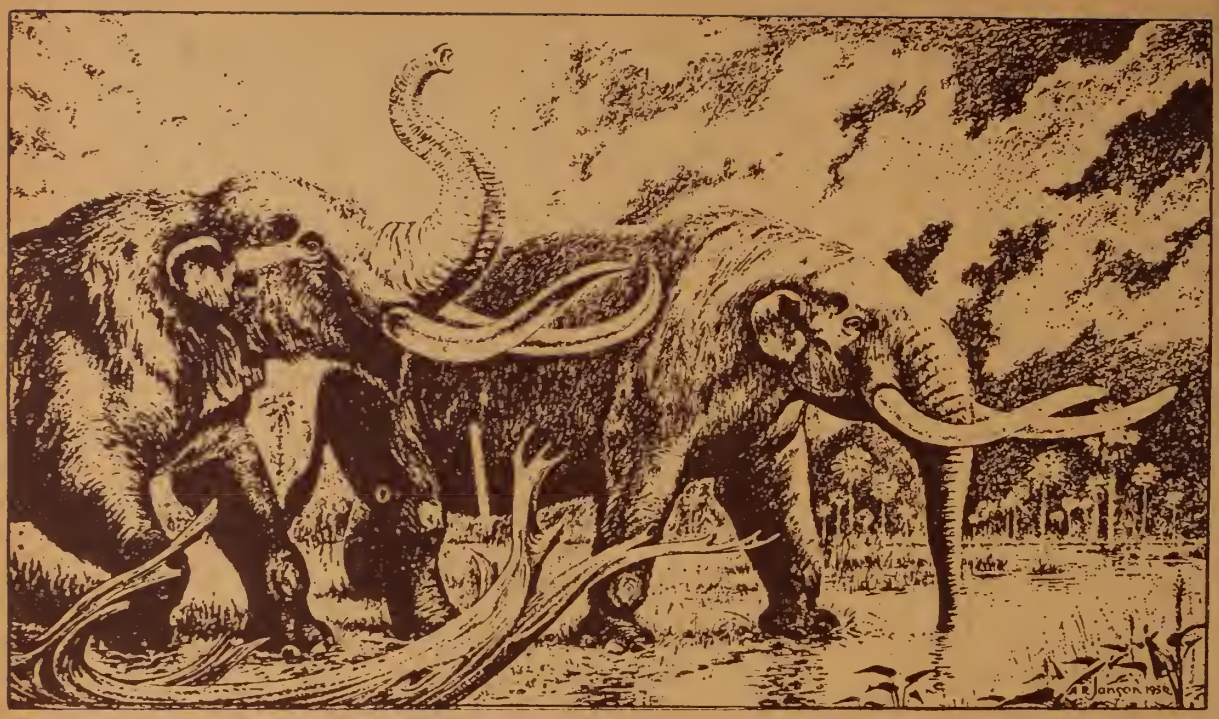


Fig. 3. — Pleistocene mastodon. Reprinted from Fossil Mammals of Florida by Stanley J. Olsen, Florida Geological Survey, Special Publication No. 6, 1959.

human inhabitants of Florida. The mammoth had only one pair of tusks and the elongated molars bore distinguishing characteristics that identify the three species found in North America. The wooly mammoth, *Elephas primigenius,* never migrated as far south as the Florida peninsula; however, numerous bones, tusks and molars of the Imperial *(E. imperator)* and Columbian mammoths *(E. columbi)* have been recovered from springs and caves. In 1966, more than half of an associated mammoth skeleton was discovered in the springrun of Silver Springs.[8]

Why did it happen that the elephant, the only known animal capable of understanding human speech, almost became extinct in the short span of 20,000 years? The decline and disappearance of the mammoth in Florida seems to coincide with the appearance of knives, spearpoints and arrowheads fashioned by early Florida immigrants.[11] The earliest and most primitive of these lithic artifacts are the Suwannee points which date from 10,000 B.C. The history of man scarcely detracts from the hypothesis that Florida's early elephant hunters were instrumental in exterminating the largest of mammals that once roamed the peninsula.

The writer's introduction to Florida's springs occurred several years ago during the course of experiments on kidney function and osmoregulation in marine fishes.[12] We were interested in the mechanism that enabled marine fishes to enter coastal estuaries and invade the freshwater streams and lakes of Florida. Marine bony fishes maintain the mineral concentration of their body fluids at approximately 30 per cent of the value for sea water. The transition from sea water to fresh water produces a reversal of the usual concentration gradient between body fluids and the external environment. Water tends to diffuse into the tissues across the gills, and most marine fishes quickly die when transferred directly from sea water to mineral-free water. The single characteristic common to spring water is the relatively high concentration of dissolved calcium salts. Our experiments showed that marine fishes could thrive in water of extremely low salinity provided that the calcium concentration remained high. Calcium reduces the rate of water diffusion across living membranes and in marine fishes ascending calcium-rich freshwater streams in Florida, the effect of this ion is to retard the influx of water to a

rate that can be countered by a renal excretory rate of nearly the same magnitude.

Returning once again to the earlier discussion of Hornsby Springs and Sink, the writer has examined and explored part of the immense cavernous passages that lie more than a hundred feet below the ground surface. The water flowing through the sink and on toward the springs originates upstream from still another large cavern. Unidentified fossil bones and teeth of enormous size can be seen projecting from the calcareous bedrock of the cave floor. The living fauna is equally as remarkable as the fossil remains of prehistoric animals. The blind, white crayfish, *Procambarus pallidus,* crawls in total darkness across the pebbled and rocky surfaces (Fig. 4). In this and other caves, freshwater eels are common (Fig. 5) and at Lost Sink in Hernando County, white catfishes of unknown species have been observed at depths of over 200 feet.

Each cave that forms part of the network of underground rivers in Florida has its own identifying physical features. It often has a fossil accumulation that is peculiar to some special characteristic of its geologic history (Fig. 6). Now that man can examine these caves to great distances and previously impossible depths, we can be confident that new revelations will come with each exciting discovery (Fig. 7).

In all the cave dives performed by the author, he has been most fortunate to have the instruction, guidance and company of Mr. W. T. Mount. Tom Mount is recognized as one of the most capable cave divers in the United States, and inexperienced divers will profit from his sound advice on the techniques and practices of cave diving.[13, 14]



Fig. 4. — The blind crayfish, *Procambarus pallidus,* of this photograph was collected from a depth of 150 feet in Hornsby Sink, Alachua County.

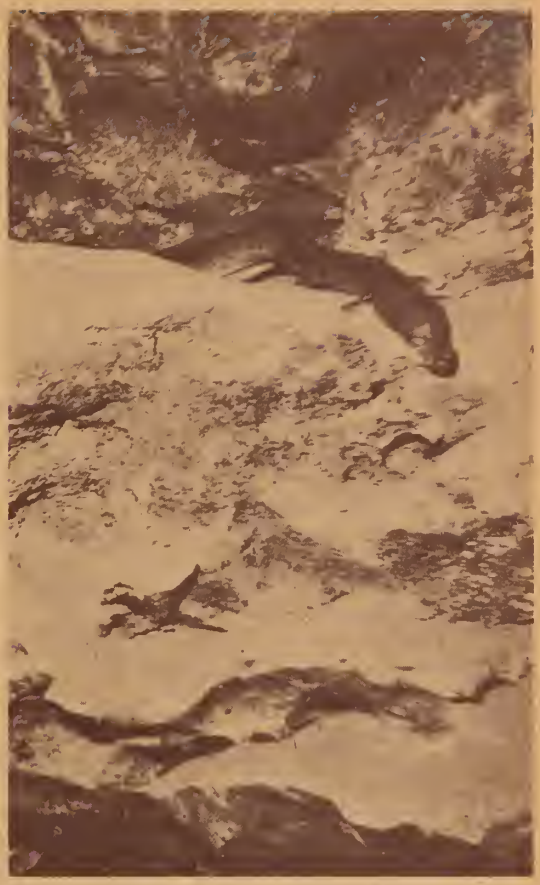


Fig. 5. — A freshwater eel observed in a Florida sinkhole.



Fig. 6. — One specimen from a large mound of sand dollars occurring in association with numerous shark teeth. Specimen collected from an artesian spring in Volusia County.



Fig. 7. — A cave diver exploring Devil's Eye in Gilchrist County.

References

1. Dolan, E. M. and Allen, G. T. Jr.: An Investigation of the Darby and Hornsby Springs Sites, Alachua County, Florida, Special Publication No. 7, Tallahassee, The Florida Geological Survey, 1961.
2. Puri, H. S. and Vernon, R. O.: Summary of the Geology of Florida and a Guidebook to the Classic Exposures, Special Publication No. 5, Tallahassee, The Florida Geological Survey, 1964.
3. Chauvin, R. S.: Florida from Indian Trail to Space Age, Vol. I, pp. 281-304, Delray Beach, The Southern Publishing Company, 1965.
4. Gamow, G.: Biography of the Earth, Its Past, Present and Future, New York, Viking Press, 1948.
5. Puri, H. S.: Stratigraphy and Zonation of the Ocala Group, Geological Bulletin No. 38, Tallahassee, The Florida Geological Survey, 1957.
6. Ferguson, G. E.; Lingham, C. W.; Love, S. K., and Vernon, R. O.: Springs of Florida, Geological Bulletin No. 31, Tallahassee, The Florida Geological Survey, 1947.
7. Brooks, H. K.: The Submarine Spring Off Crescent Beach, Florida, Quart. J. Florida Acad. Sci. 24:122-134 (June) 1961.
8. Martin, R. A.: Eternal Spring, St. Petersburg, Great Outdoors Publishing Company, 1966.
9. Olsen, S. J.: Fossil Mammals of Florida, Special Publication No. 6, Tallahassee, The Florida Geological Survey, 1959.
10. Aguirre, E.: Evolutionary History of the Elephant, Science 164:1366-1376 (June) 1969.
11. Bullen, R. P.: Florida's Prehistory, Florida from Indian Trail to Space Age, Delray Beach, The Southern Publishing Company, 1965.
12. Hulet, W. H.; Masel, S. J; Jodrey, L. H., and Wehr, R. G.: The Role of Calcium in the Survival of Marine Teleosts in Dilute Sea Water, Bull. Marine Sci. 17:677-688 (Sept.) 1967.
13. Erving, J. M. Jr. (Ed.): World Wide Skindiver's Guide, Little Rock, Pioneer Press, 1968.
14. Mount, T.: Cave Dwelling, Dive Magazine, pp. 24-27 (June) 1968.

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The Lady Doctor of the Grove

William M. Straight, M.D.

Sam Lewis was a quick-tempered, hostile man born to live by the gun and die by the gun. He appears in our story as a wounded fugitive holed up in a shack on the Hadley place near what is now Miami's elite subdivision, Bay Point. Several weeks before, Lewis and his favorite shotgun, Nancy, had killed two men on Lemon City's main street in broad daylight. Returning with the avowed intent of killing a third, he had mortally wounded Rhett McGregor, one of the posse sent to intercept him and had himself been wounded. He dragged himself into the shack, barred the door and threatened anyone who approached with death. What Lewis did not know was that in three weeks he would be taken from the Juno jail, shot and swung from the crossarm of a telegraph pole by an angry lynching mob.

But we have gotten sidetracked. We started out to talk about the intrepid lady doctor of Coconut Grove, Eleanor Galt Simmons. On that particular August afternoon, 1895, Mrs. Julia Tuttle sent her yacht to fetch the doctor for Rhett McGregor, who had received one bullet in the neck and two in the body. Dr. Simmons dressed his wounds and made him as comfortable as possible then she called to Lewis and offered to aid him. At first he refused, then he agreed, if she came unarmed. She removed two bullets from his right thigh and one from his left leg, dressed his wounds and splinted the compound fracture of the leg. She refused his request for enough chloroform to put himself to sleep permanently. A few hours later, wracked with pain, thirst and hunger, Lewis surrendered and the conclusion of the story you know.[1]

Medical Training

Now back to the story of Dr. Eleanor Galt Simmons, the first woman physician to practice in Dade County. She was born to Dr. Joseph Galt and his wife, Louise, in Delaware County, New York, in 1854. Efforts to trace her parents, exact birthplace, birth records or survivors of the family have been fruitless. According to a brief biographical sketch furnished by the Woman's Medical College of Pennsylvania, her early education was under tutors. The first mention of her appears in the Annual Announcement of the Woman's Medical College of Pennsylvania, Philadelphia, 1879-1880. At the "twenty-seventh Annual Commencement, held at the Association Hall on Thursday, March 13, 1879, at 12 M," Eleanor E. Galt received the degree, Doctor of Medicine, from the college president, T. Morris Perot, Esq.

In those days, the attitude of both physicians and the public toward women in medicine was quite different than it is today. You will recall the first woman to obtain the degree Doctor of Medicine in this country was Elizabeth Stone Blackwell in 1849. When she tried to start her practice in New York City, landlords refused to rent an office to her. She finally found a tolerant landlord, but all the other tenants of the building moved out. When her sister, Emily, applied for admission at Geneva Medical College, hoping to follow in her sister's footsteps, the school refused to take her for fear it would lead to an influx of women with a decline of men. To provide a school for aspiring women physicians, Woman's Medical College of Pennsylvania opened its doors on October 12, 1850. However, not all the problems were solved, for the school had no proper hospital in which to provide bedside teaching. Arrangements were made at the Philadelphia Hospital (Blockley) in 1868 for the women students to attend the general clinics in the amphitheater. As the material



Fig. 1. — Woman's Medical College of Pennsylvania, 1879.

Dr. Straight is instructor in the history of medicine, University of Miami School of Medicine, Miami.

to be seen there was not sufficiently varied, permission was obtained for them to attend the Saturday morning surgical clinics at the Pennsylvania Hospital. On November 6, 1869, the dean and her 30 neatly dressed and stiffly starched lady medical students filed into the amphitheater amidst jeering, groaning, whistling and the stamping of feet by the men students. When the clinic ended, the ladies found they had to file out between lines of several hundred medical students assembled from all the medical schools in Philadelphia. The newspaper describes the scene: "Ranging themselves in line, these gallant gentlemen assailed the young ladies, as they passed out, with insolent and offensive language, and then followed them into the street, where the whole gang with the fluency of long practice, joined in insulting them. . . . During the last hour missiles of paper, tin foil, tobacco-quids, etc., were thrown upon the ladies, while some of these men defiled the dresses of the ladies near them with tobacco juice. . . . It is but just to the ladies to say that they maintained their position as scientific students by a quiet and modest demeanor. It was quite evident from their general appearance that none of them had ever been accustomed to the association of such unmannerly men before."[2]

This demonstration backfired: the press and laity of Philadelphia enthusiastically championed the cause of the women medical students. However, even by the time Eleanor Galt graduated, the way was still uphill. There was still the problem of obtaining hospital training and after that getting a practice started and becoming a part of organized medicine. The first woman to be accepted for membership in a county medical society was Anna Lukens who was admitted to the Montgomery County Medical Society, Norristown, Pa., in May, 1870.[3] The first woman to be admitted to a state medical society was Francena Elizabeth Porter who was admitted to the Kansas Medical Society, April 9, 1872.[4] As late as the turn of the century, the feeling of most male physicians about the role of women in medicine is aptly expressed in the following quote: "The whole question of woman's place in medicine hinges on the fact that, when a critical case demands independent action and fearless judgment, man's success depends on his virile courage, which the normal woman does not have nor is expected to have."[5]

To obtain the M.D. degree at the Woman's Medical College at that time, one must have attended at least two full courses of lectures on Chemistry and Toxicology, Anatomy, Physiology and Hygiene, Materia Medica and General Therapeutics, Principles and Practice of Medicine, Principles and Practice of Surgery, and Obstetrics and Diseases of Women and Children. In the course of Practical Anatomy the candidate must have "made at least one creditable dissection of each of the usual divisions of the cadaver."[6] The student paid a matriculation fee of $5 and bought a "ticket" from each of the professors for $15. These expenses plus other incidental costs brought the total cost of "two or more courses of Lectures and Graduation" to $265. There were scholarships available for promising but indigent students, and girls wishing to become medical missionaries were taken for half price. "Board can be obtained at a convenient distance from the college for prices varying from $4.00 to $6.00 per week."[6]

Throughout the years Woman's Medical College has enjoyed the support of some of the greatest names in Philadelphia medicine, for example, Dr. Alfred Stille and Dr. S. Weir Mitchell. Eleanor Galt had as her lecturer in clinical anatomy the famous Civil War surgeon, W. W. Keen. Her dean and professor of chemistry, Rachel L. Bodley, continuously emphasized that women should win their way in the medical world by learning, not by "womanliness." Years later as a member of the Coconut Grove Housekeeper's Club (forerunner of the Coconut Grove Woman's Club) Eleanor Galt Simmons perhaps reflected the dean's teaching when she gave as her favorite quotation, "By their works ye shall know them."[7]

Beginning of Practice

The Medical College announcement lists Eleanor Galt's address as Oneonta, New York, but attempts to trace her there have been unsuccessful. According to the sketch provided by the Woman's Medical College, after graduation Eleanor Galt practiced briefly in Cortland, New York, then became "First Assistant" at the Woman's and Children's Hospital, Staten Island, New York. Although there is no record of a hospital by that name on Staten Island, there was the New York State Woman's Hospital, New York City, which is listed in Butler's Medical Register, 1878, as having a "Country Branch" on Staten Island which accommodated 40 mothers and infants.[8]

In Polks Medical Directory for 1886 she appears practicing in Elizabeth, New Jersey.[9] From scraps of correspondence on file at the Historical Museum of Southern Florida and the Caribbean, in 1886-1887 she was living at 130 Jefferson Ave., Elizabeth, N. J. At that time she was practicing

medicine and was engaged in studying the anatomy of reptiles. She was making drawings of the skeletons of North American reptiles as illustrations for a text on that subject by a Professor E. D. Cope of Philadelphia. The correspondence available indicates she received repeated shipments of specimens from the Smithsonian Institution in connection with this project. Also in the above material is the handwritten draft of a talk entitled, "A Study of the Hyoid Apparatus of Some American Types of (?) Ordelous Batracians." In 1890, according to Polk's Medical Directory, she was residing at 97 Lexington Ave., New York, and in the Medical Directory of New York State for 1892-1893, she is listed under her married name residing at 241 W. 43rd Street, New York.[10]

Although she practiced medicine in Elizabeth, New Jersey, during the years 1886 to 1892, she was not a member of the Medical Society of Elizabeth (then consisting of 13 members).[11]

According to the Woman's Medical College sketch she married Captain Albion R. Simmons in 1891, but where is not stated. The City Directory of Elizabeth lists "Albion R. Simmons, Investment Securities" whose home address is 1150 East Jersey Street and also lists "Dr. Eleanor G. Simmons" at the same address.[12]

In November, 1892, Captain and Dr. Simmons moved to Coconut Grove, Florida. Since this was four years before the railroad reached Miami, it is likely they came from New York to Jacksonville on a steamer. At Jacksonville they could board the train to Titusville and there transfer to a river boat which took them to Jupiter. At Jupiter they could board the Jupiter and Lake Worth Railroad, better known as "The Celestial Railroad" since it serviced Jupiter, Venus and Mars, for a 30-minute ride to Juno. Thirty minutes that is, if the engineer, Blus Rice, did not stop to let the passengers hunt deer or turkey as some critics of the railroad said he did. At Juno they could board a small steamboat that carried them down the lake to Lake Worth (the present Palm Beach). From Lake Worth they could board a sailboat which sailed down around Cape Florida and across the bay to debark them at Coconut Grove or up the bay to the mouth of the Miami River or to Lemon City depending on the draft of the vessel.

There is a story which though romantic is apocryphal, that Eleanor Galt met Captain Simmons in Key West when she was seeking passage to Coconut Grove. He offered to bring her up on his sailboat but since it would be improper for a single woman to be alone on the boat with an unmarried male, they were married in Key West before departure. A search of the records at Key West fails to show that they were married there, and as we have seen, they were apparently married while living in Elizabeth, New Jersey.

Life in the Community

Coconut Grove in August, 1892 had 250 inhabitants, give or take a few. Most of these were newcomers, for an account in the newspaper of the day states, "Twelve months ago less than a dozen settlers could be found on the bay, while today more than 500 people are located on homesteads. . . ."[13] The business establishments were clustered on either side of McFarlane Road and Grand Avenue. McFarlane Road, then known as Main Street, was merely two pitted ruts worn by wagons ascending the gentle grade to the junction of Grand Avenue and another wagon rut which later became known as Main Highway. Grand Avenue, itself, was only a little more improved than the other two roads.

Chief among these establishments were the Peacock Inn located on the rise on the southwest side of Main Street, the Sanders-Peacock Company (a general store) on Grand Avenue at the head of Main Street, and Charles Peacock and Son Store on the northwest side of Main Street where it met the Miami Road (now South Bayshore Drive).

The one-room schoolhouse on Grand Avenue was the educational institution of Coconut Grove. On the southwest side of Mary Street, half way between Grand Avenue and the present Bayshore Drive, stood Hardie's Blacksmith shop, shaded by some of the very oaks that stand there today. A little east of Hardie's and on the bayshore was Robert's Fish House where the sponge fishermen tied up. There used to be a crystal clear, fresh water boil there just alongside the dock where the fishermen could fill their casks. Between the rutted, narrow wagon road that later was called Main Highway and the bay grew up estates soon to be known as "millionaires row." Here along the bluff were the homes of the Grove's early and wealthy citizens: the Peacocks, Commodore Ralph M. Munroe, Kirk Munroe, W. J. Matheson, McCormick, James L. Nugent, and the colorful bachelor, "The Duke of Dade," J. W. Ewan.

Captain and "Mrs. Doctor Simmons" bought eight acres of land extending from a road, later to be called Douglas Road, to the bay. This land at the present, 4013 Douglas Road, was subsequently in the possession of Mr. Nugent, and in 1916

was purchased by Dr. and Mrs. David Fairchild. Dr. Fairchild christened his estate The Kampong, the name it retains today. Captain and Dr. Simmons, using plans reportedly from the Encyclopedia Britannica, built the first house on the property, a coral rock (oolite) structure near the bayshore. This house later burned and was replaced by a frame one further from the bayshore. They also built a rock structure about the middle of their property which is still standing and which Dr. Simmons used as an office. Her brass doorplate may still be seen attached to the wall alongside the door. Dr. Fairchild used this building as his study and laboratory for horticultural experiments. Finally, near the entrance from Douglas Road, Captain Simmons built a factory in which he made guava jelly about which we will have more to say later.

In 1892, physicians were scarce in the Biscayne Bay area. There was Dr. John W. Jackson who had moved from Eustis, Florida, to the Grove in February, 1892. However, he was better known as a grower of "pines" (pineapples) and other prize-winning fruits and for his faithful service on the county school board than for his practice of medicine. Although the paucity of inhabitants did not make for a rushing practice of medicine, Dr. Simmons was issued an occupational license in Dade County for the year 1893-1894. This cost her $1 and won her the distinction of being one of the first five physicians so licensed.[14] The others were: Drs. John W. Jackson, R. B. Potter, H. C. Hood, Frederick Obera, and Harry Stiles.[14] Hood and Potter were at Lake Worth but the location of Obera and Stiles is unknown.

Coconut Grove was still very much a frontier community when the lady doctor arrived. Just the year before Dick Carney, another colorful character of the early Grove, had unwittingly surprised a panther, also known as a puma, cougar and mountain lion, on the path leading from Commodore Munroe's boathouse. The frightened animal, later found to be ten feet long, knocked Carney to the ground in his haste to get away. As late as March, 1900, a panther was sighted in the woods north of the Grove. Rattlesnakes were an everyday occurrence in and around the houses.

Land two miles from the Grove was selling for about $10 an acre in 10-acre plots. Mail reached the Grove by devious routes. In the early days Commodore Munroe would sail out to a rendezvous near Fowey Rock Light where the skipper of



Figure 2. (Drawn by Newton Randum, former display artist for the Smithsonian Institution).



Fig. 3. — From the Encyclopedia Britannica.

the Clyde Line Steamer bound from New York to Havana would heave over the mail, newspapers and other items in waterproof wrappings to be picked up by the Commodore. Later it came by train to Lemon City, then by sail to Miami and over land or by sail to the Grove.[15] In time the railroad was pushed through to Cutler (early 1904) and the Grove had its own station.[16]

Travel between Miami and the Grove was almost entirely by sail or rowboat for the first 20 years or so. In the winter of 1892 William Brickell hired a lot of sturdy pioneers and opened "a rock road from their store at the mouth of the Miami River to the end of their immense possessions, some three miles."[17] In the summer of 1896, the county commission ordered the building of a public highway to begin on the south bank of the Miami River opposite the foot of Avenue D (present Miami Avenue). The road was to proceed to Brickell Avenue, then to the "punchbowl" and on to Coconut Grove. This road, 15 feet wide and paved with crushed rock, was only partially completed by the summer of 1897.[18] Mrs. Harlan Trapp described this road as "so slippery that the horse's or mule's feet would slide back several inches with every step. It would take an hour and a half to get to town to buy a spool of thread



Fig. 4. — A Brass Doorplate.

at the Douglas Store. . . ."[19] By 1906 the drive through Brickell Hammock was a major tourist attraction and the return trip could be made via the "west loop" which took the traveler through the pineland. Elizabeth Cron Clark describes the drive as "a long stretch of wilderness, a deep hammock that was dark by four o'clock on a December afternoon, a great, beautiful, tangled mass bound together by leafless vines of many shades of green, and arcaded by ancient trees that met overhead."[20]

Telephones reached Miami in the winter of 1899 and by August of that year, three phones were in service in Coconut Grove: the Coconut Grove Inn, A. R. Boggs, and "Dr. A. R. Simmons."[21] By the appearance of Miami's first telephone directory, 1902, telephone number 48 would get you Dr. E. G. Simmons. An electric generating plant was established in Miami about July, 1899, but it is not certain when electricity reached the Grove. The first record of an automobile in Miami is the advertisement of the "locomobile" which offered joy rides to the golf grounds and moonlight rides for 25¢ a person in the spring of 1901.[22] Automobiles did not become a common sight in either Miami or the Grove for another five or six years.

As previously noted, the doctor business was not very demanding in those days even if the doctors were few. Although Dr. Simmons was probably seeing patients soon after her arrival, the first mention of her patients in Dade County is the treatment of Rob Moffatt who had acquired pneumonia while fighting "the terrible forest fire" of the summer of 1894.[23] Rob died but the family was grateful for the sincere efforts of Dr. Simmons. Charles A. Richards recalls that about 1896, his brother, Henry J. Wagner, was thrown from a horse and broke his arm on their homestead near the intersection of what is now Old Cutler Road and Sunset Drive. Their father put the arm in a sling and walked with the boy to Dr. Simmons' house where the lady doctor splinted it and "it healed perfectly." The Miami Metropolis for August 20, 1897, notes in its "Coconut Grove Items" that C. M. Stow dislocated his shoulder and was brought to Miami by Drs. J. W. Jackson and Eleanor Simmons "where they operated it successfully with the help of Dr. Baskin." (J. G. Baskin).

The year 1898 and the Spanish-American War brought 7,500 troops to Miami between June 24 and August 13. The camp site extended inland from the bay along what is now Northwest 5th Street. The camp was poorly layed out, latrines

were hard to dig in the coral rock, and the half-barrels designated as toilets were irregularly emptied, so many of the soldiers defecated on the ground. The water supply became contaminated and typhoid, dysentery and measles, among other troubles, spread through the camp. Mosquitoes came in swarms and netting was in scarce supply. One soldier writing home told his folks that if he owned both Miami and Hell, he'd get rid of Miami and go to live in Hell. A newspaper article of this time mentions "Captain and Mrs. A. R. Simmons" buying mosquito bars for the military hospital and paying a visit there. The last of the troops left Miami on August 13, 1898, and peace and calm again settled on the town.

The year 1899 brought two more medical disasters, an epidemic of dengue fever with 300 cases between July and October, and yellow fever which began October 20. This latter epidemic resulted in 220 cases with 14 deaths. By a rigid quarantine with armed guards, the epidemic was contained in Miami and did not spread to the Grove. However, it did stifle trade between the two towns. Only those who could prove they had had yellow fever were issued pass cards permitting them to go in and out of Miami. Mail was disinfected by punching holes through the envelope, letter and all, and placing it in a fumigating box with burning sulfur. Newspapers were similarly fumigated but were not perforated.[24] With the onset of cold weather the epidemic died out and the quarantine was officially lifted January 15, 1900.

A delightful story of the lady doctor and her lawyer husband appears in John Sewell's Memoirs. He tells us, "I met Captain A. R. Simmons and his wife, Dr. Simmons. She was the only practicing physician in that part of the country and was considered very fine in her profession. The Captain was a retired lawyer, but was experimenting in preserving citrus fruits, of which he made a success. These were fine people but they had their peculiarities."[25] He goes on to tell that they made a pact before death that the doctor's body was to be cremated and the ashes taken to New York for burial. The Captain's body was to be buried at sea due east of the Cape Florida light. The doctor died first and the Captain carried out her wish. The Captain then made a pact with the author, Kirk Munroe, to carry out his wish. As luck would have it, the Captain died while Munroe was on a round-the-world trip and his body was sent north and buried. Upon his return, Munroe journeyed north, exhumed the body and returned it to Miami for the previously arranged burial. H. M. King, the undertaker, sewed the remains in a canvas wrapping and attached a considerable weight of lead to the feet, then the parcel was put aboard a boat and taken to the agreed upon location. However, "The undertaker had not figured what amount of lead it would require to sink Captain Simmons, but as it happened the undertaking boat was in command of Captain Charles Thompson, who always knows what to do in any kind of trouble around boats or water; so they fished up the body and Captain Charlie had a 500 pound anchor aboard. He lashed that to the Captain's feet and put the body overboard again. So the Captain stayed put that time."[25]

Captain Simmons, as noted above, was a lawyer and was apparently admitted to the Florida Bar. However, he became interested in the making of guava jelly which he shipped north and even to London. He also made guava wine which he stored in earthenware jugs and reserved for the consumption of the local gentry. Dr. John C. Gifford comments that this wine "was how many of us got our much needed vitamins."[26] One of the pioneers of this area remembers working in this factory as a boy and locates it near the entrance to the Kampong.

Captain Simmons' past is shrouded in deeper obscurity than the Doctor's but one newspaper article mentions that during the War Between the States he was "a guest of President Jefferson Davis . . . and he is still more of a Yank than a Rebel."[27] Perhaps his army life accounts for the title, "Captain."

Doctor Simmons is remembered as a petite, blond, well-groomed person of conservative dress and manner. Her dresses came to her ankles; only her high-buttoned shoes showing beneath them. She probably also wore a broad-brimmed hat. She was friendly, easy to talk to, and walked with a quick step. Several of the early settlers mention her making rounds on a pony, horse or mule, and Dr. J. G. DuPuis states she carried saddlebags thrown across the neck of the pony.[28] Within the memories of the pioneers interviewed, she apparently made most of her rounds in a road cart, a two-wheeled cart drawn by a single horse, which was driven by the Doctor or by her houseboy. No one recalls seeing her in an automobile.

She was elected to the Housekeeper's Club in 1893 and was an active member until her death. The club's minute books show she was a generous donor to their fund-raising drives and gave talks to the members on emergency medical care, health

and hygiene. They also contain her favorite recipe for "green mango pie."

She became a member of the Florida Medical Association at its Annual Session in April, 1898, and promptly paid the $5 which covered the initiation fee and one year's dues. When the Dade County Medical Association was organized, Thursday, September 3, 1903, "Dr. Simmons of Coconut Grove" was enrolled as a charter member although she was unable to attend the initial meeting.[29] At a later meeting she presented a paper on "Bacteriology."

In late October, 1899, a note appears in the Miami newspaper, "Dr. Simmons is very sick with an old time trouble. She has refused to give up her practice, even while suffering acutely in riding about the country to attend patients. At this writing, the 18th, she is resting more easy under the influence of narcotics to ease the intense pain."[30] One week later the paper notes she is out of danger and adds that Dr. R. VanEzdorf of the U.S. Marine Hospital Service had performed a very successful operation for peritonitis and "using the surgical instruments with a skill which long practice alone can give, he succeeded in relieving the patient of a pint or more of pus."

After that time, she apparently did not regain robust health and for this reason reduced her practice to being physician for the Lake Placid School and the Adirondack-Florida School (now Ransom School) in the Grove. The last three years of her life she spent the summers in North Carolina. In November, 1908, because of continued illness, she moved from the Grove to Miami to be near her favorite physician. A diagnosis of "tuberculosis of the brain" was made and she died February 2, 1909.

Time had marched on and new people had flocked to picturesque Coconut Grove. Homes had sprung up throughout the piney woods and thick hammocks bordering the bay. Although the home folks still relied on the horse and wagon, the slogging of horses' hoofs and the creaking of wagon wheels were being gradually replaced by the whining and grinding of the automobile. The ubiquitous "gas station" had not yet appeared but gasoline was available in five-gallon milk cans at the Sanders-Peacock Store. Except for short stretches at the intersection of Main Highway and Grand Avenue, the Grove's streets were "paved" with crushed coral rock which threw off a blinding glare and clouds of dust on sunny days and became a ribbon of water-filled potholes during the rainy months.

Sixteen years had passed since the lady doctor arrived at the Grove; during most of these years she had been the Grove's only resident physician. Perhaps during the last few months of illness Dr. Simmons wished for the "good ole days" or perhaps she looked to "the exciting prospects of the future." Whichever way she viewed the scene, her time had run out and she must leave.

The community, grateful for her years of faithful service and wise counsel, came in numbers to pay their last respects at the First Presbyterian Church of Miami on Avenue "A" at 12th Street (S.E. 3rd Avenue and Flagler Street). The Dade County Medical Association attended in a body and published a resolution noting her dedication to the welfare of the Grove community and pointing out that she was the first of their membership to be called by death.[31]

Her ashes were taken to New York State for burial, but where they rest today is unknown.

References

1. Conklin, Oscar T.: "Dade's Bloody Period." The Miami Metropolis, (July 2) 1909, p. 3.
2. Alsop, Gulielma Fell: History of The Woman's Medical College, Philadelphia, Pa., 1850-1950, Philadelphia, J. B. Lippincott Co., 1950.
3. Correspondence: Rolan, Ralph M., Executive Secretary, Montgomery County Medical Society, Norristown, Pa., to the author, Aug. 28, 1968.
4. Peck, Phoebe: Women Physicians and their State Medical Societies, J. Am. Med. Wom. Assoc. 20:351-353 (April) 1965.
5. Fishbein, M.: History of the American Medical Association, 1847-1947, Philadelphia, W. B. Saunders Co., 1947, p. 218.
6. Thirtieth Annual Announcement of the Women's Medical College of Pennsylvania, Philadelphia, Grant, Faires & Rodgers, Printers, 1879.
7. Minute Book of the Housekeepers Club of Coconut Grove as quoted by Mrs. F. A. Kent to the author.
8. Butler, Samuel W.: The Medical Register and Directory of the United States, Second Edition, Philadelphia, Office of the Medical and Surgical Reporter, 1878.
9. Polk's Medical Register and Directory of North America, Detroit, Baltimore, Chicago, R. L. Polk & Co. Publishers, 1886 (also 1890).
10. Correspondence: O'Brien, Jack. Membership Director, Medical Society of the State of New York, to the author, August 13, 1968.
11. Correspondence: Carney, Mrs. Pat, Bureau of Vital Statistics, Elizabetb, N.J., to the author, April 25, 1968.
12. Correspondence: Nevin, Richard I., Executive Director, The Medical Society of New Jersey, to the author, August 14, 1968.
13. Editorial quoted from the Orange City Dispatch, June 23, 1892, et. seq. in The Tropical Sun, August 11, 1892, p. 3.
14. Welsn's Scrapbooks, Dade #1, p. 16 Miami Public Library Florida Collection.
15. Miami Metropolis, May 15, 1896, p. 4.
16. Miami Metropolis, Oct. 9, 1903, p. 7.
17. "Biscayne Bay Bilins," Tropical Sun, April 21, 1892, p. 1.
18. Miami Metropolis, July 9, 1897, p. 2.
19. Trapp, Mrs. Harlan: My Pioneer Reminiscences, Printer not stated, 1940, p. 8.
20. Clark, Elizabeth Cron: Early Recollections of Miami, Mimeographed Pamphlet, undated. p. 11.
21. Miami Metropolis, August 18, 1899, p. 7.
22. "Miami Mincemeat," Miami Metropolis, April 5, 1901. p. 6.
23. Conrad, Mary Douthit: Homesteading in Florida During the 1890's, Tequesta #XVII:3-30, 1957.
24. Miami Metropolis, November 3. 1899, p. 6.
25. Sewell, John: Memoirs and History of Miami, Florida, Privately printed, 1933, p. 23.
26. Gifford. John C.: Five Plants Essential to the Indians and Early Settlers of Florida, Tequesta 4:36-44 (Nov.) 1944.
27. The Daily Miami Metropolis, April 14, 1905, p. 5.
28. DuPuis, John G.: History of Early Medicine. History of Early Public Schools, History of Early Agricultural Relations in Dade County, Privately printed, 1954, p. 32.
29. "Medical Association Formed," Miami Metropolis, Sept. 4, 1903, p. 1.
30. Miami Metropolis, October 20, 1899, p. 8.
31. Miami Metropolis, February 5, 1909, p. 1.

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History of Rhinoplasty An Epitome of Plastic Surgery

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Plastic surgery of some sort has been practiced for at least 5,000 years, but not until this century has it been recognized as one of the major surgical specialties. The goal of this paper is to present a glimpse of the large and intriguing field of plastic surgery as a historical review of rhinoplasty. This procedure has been performed for all of these 5,000 years and is one which exemplifies the work of the plastic surgeon.

Sir Zachary Cope mentioned in his "Short History of Plastic Surgery,"[1] "At least one form of plastic surgery is almost as old as civilization, for the Vedic writings mention the formation of a new nose by operation. The need for this arose because one form of punishment in India was the cutting off of the soft parts of the nose. Such a defect was so humiliating that patients were willing to undergo attempts to reform the nose, though the procedure must have been very painful. The new nose was formed from flaps of skin taken either from the adjacent cheeks or from the forehead."

One author divides the history of plastic surgery into four periods[2] and these divisions are used for this presentation. The first and longest period goes back approximately 5,000 years and extends to the middle of the 19th century when anesthetics and antiseptics revolutionized surgery. The second was from the middle of the 19th century to the beginning of World War I in 1914, and was highlighted by tissue transplant techniques. The third, from 1914 to 1945, included both World Wars, and the fourth was from 1945 to the present time and includes the establishment of plastic surgery as a recognized specialty.

First Period—3000 B.C. to 1850 A.D.

Perhaps the earliest form of rhinoplasty performed was documented in the Edwin Smith Papyrus (3000 B.C.) which refers to the use of pressure dressings in the treatment of nasal fractures. One of the cases described in this papyrus exemplifies this form of treatment:[3] "If thou examinest a man having a break in the chamber of his nose and thou findest his nose bent, while his face is disfigured and the swelling which is over it is protruding, thou shouldest say concerning him: 'One having a break in the chamber of his nose. An ailment which I will treat.' Thou shouldest force the nose to fall in, so that it is lying in its place, and clean out from him the interior of both his nostrils with two swabs of linen until every worm of blood coagulates in the inside of his two nostrils comes forth. Now afterward thou shouldest place two plugs of linen saturated with grease and put into his two nostrils. Thou shouldest place for him two stiff rolls of linen, bound on."

The first real reconstructive operations were performed by the Hindus, who were especially skilled in skin shifting. Sushruta, the father of Hindu surgery, wrote his original Samhita about 600 B.C. based on the four sacred Vedas written many years earlier. The early Hindu surgeon was a well-trained individual possessing a knowledge of anatomy, skin grafting and other techniques in reconstructive surgery.

Sushruta writes[4] "The love of life is next to our love of our own face and thus the mutilated cry for help." Probably the oldest known method of rhinoplasty is Sushruta's operation for the reconstruction of a lost nose by the advancement of a cheek-flap. India at this time excelled all other nations in the methods of reparative surgery. Hindu surgery, however, began its gradual decline from the time of Buddha (around 500 B.C.) and eventually the cheek-flap method of rhinoplasty which originated in the hands of well-trained physicians was relegated to the Kooma or Tile-maker caste.

Before abandoning this "Indian Method" of rhinoplasty it is interesting to again quote the great Sushruta in his description of his nasal

reconstruction:[5] "The careful doctor takes (as a pattern) the head of a plant the size of the nose, cuts a flap from the cheek according to the pattern laid upon it, but leaves the flap attached at one place. He quickly puts the (new) nose in place. After he has incised the edges he fastens it in the proper position with a good bandage, carefully inserts two small tubes of appropriate size, elevates it and strews over it dust of red sandalwood. Then he covers it with white cloth and moistens it often with oil of sesame . . . when the transplanted flap is united, a pedicle is divided. If the nose is too small one attempts to make it grow; if it is too large, one reduces it to the proper size."

Neither Hippocrates (460-370 B.C.) nor Aristotle (348-322 B.C.) refer to skin-shifting or rhinoplastic procedures. Aulus Cornelius Celsus (0-50 A.D.), born in Rome, includes in his *De re medica,* descriptions of the Indian method of skin-flap rhinoplasty.

Except for brief references made by such physicians as Galen, Oribasius and Paulus of Aegina, rhinoplasty remained a dormant art until its revival by Brancas in Sicily (1430 A.D.) who devised the arm-flap method of rhinoplasty which became known as the "Italian Method."

During this period of rhinoplastic dormancy many individuals in need of medical and surgical treatment were taken care of by the monks, Arabs and Jews. Pope Innocent III in 1215 A.D. declared that[6] "no priest, deacon or subdeacon should perform any surgical procedures, which involved bloodshed, as it was incompatible with the divine mission." Consequently, such aspects of medicine were again relegated to barbers, bathkeepers, sowgelders, and others.

With skepticism, Lanfranchi (1295) mentions a report regarding the affixing of a completely severed nose with subsequent healing. Nevertheless, he does explain the management of a partially severed nose. More typical of the middle-age attitudes towards rhinoplasty and cosmetic surgery in general were the views of Sir John Mandeville (1300-1372):[7] "When men pain themselves to alter the body to make it seem fairer than God made it, they do great sin. For men should not devise nor ask greater beauty than God hath ordained to be at his birth." This attitude is well depicted in much of the art prevalent during this era (Fig. 1).

Gaspar Tagliacozzi (1546-1599), professor of surgery at Bologna and considered by many as the "father" of plastic surgery, was the first to write a systematic treatise on plastic surgery. This treatise, *De Curtorum Chirurgia per institionem,* was 298 pages, contained 22 plates and focused much attention on his method of rhinoplasty-pedicle flap from arm to nose which was based on the method developed by the Brancas. Although the Brancas were mentioned in his treatise, this method of rhinoplasty soon became known as the Tagliacozzian or Italian method. Tagliacozzi performed his first rhinoplasty in 1580, some 150 years after this method was developed by the Brancas (Fig. 2). His fame soon became widespread, although the church condemned him for "undoing God's work," and after his death his body was exhumed from consecrated ground and most, but fortunately not all, of his books were burned by the clergy. Of his more original works, Tagliacozzi was the first to introduce the principle of tubed flaps (arm to nose flap), being later forgotten and reintroduced by Gillies during World War I.



Caricature of the Jews of Norwich

Figure 1

Leonard Fiorovant (c. 1600) in his *Secrets de la Chirurgia*[10] documents a case where the amputated nose is restored: "Go visit Signor Andreas, who lives in Naples, and where everyone knows his history; he will tell you that happening on the spot where the accident occurred, I took up his nose, which had fallen in the sand and washed it and replaced it in the best manner I could. Examine his nose, and listen to the statements which will be made to you and we shall see if you can still call in question a fact so clearly demonstrated." In a similar case of nasal restoration, Fiorovant adds to the above technique the novel method of cleansing the severed nose with urine prior to suturing it to the nasal stump.

An early English report of rhinoplasty appearing in the Lancet in 1824 describes an operation performed by a Mr. Travers for the restoration of a nose destroyed by lues, using the Tagliacozzian method. The Indian method was intro-

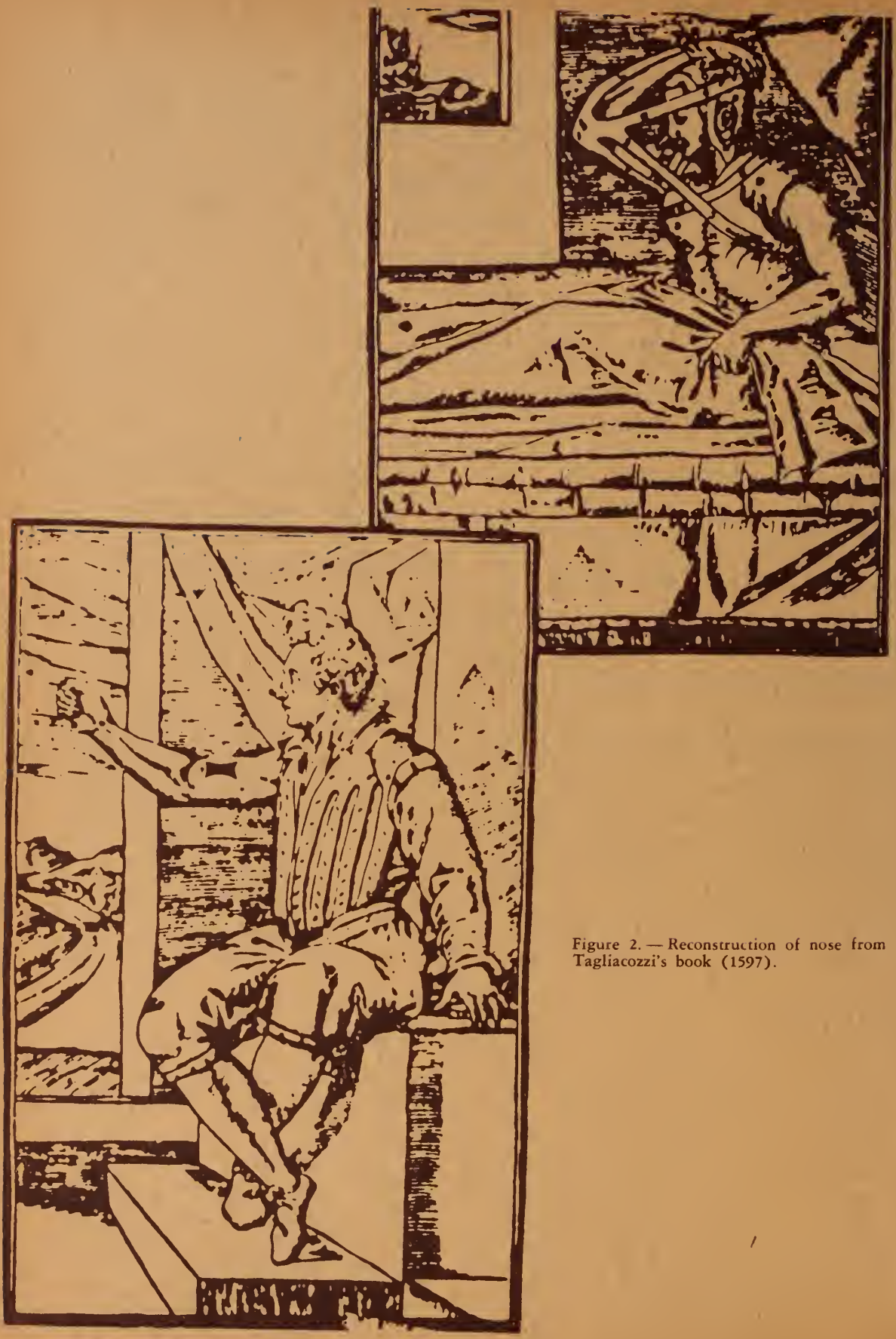
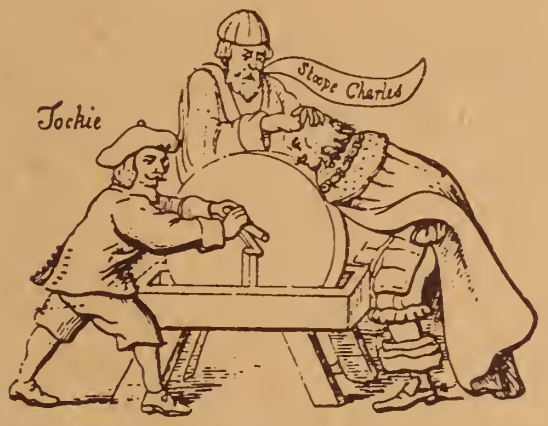


Figure 2. — Reconstruction of nose from Tagliacozzi's book (1597).

duced to Germany by von Graefe (1816), to France by Lisfranc (1826) and to the United States by J. M. Warren (1834).

At the turn of the century the physiologist Giuseppe Baronio successfully performed free transplantation of skin on sheep. The credit for the development of free grafts in humans is given to a Hungarian, John R. Wolfe, professor of ophthalmology at the University of Glasgow. He described his method in a lecture given in 1886.

Dr. J. M. Warren (1811-1867) of Boston was the first to perform a nasal reconstruction in the United States, in 1834.



(A seventeenth century broadside. Rhinoplasty — of a sort.)

Figure 3

Second Period—1850 A.D. to 1914 A.D.

This second era in the evolution of rhinoplasty was highlighted by three significant developments which revolutionized surgery in general. These three developments were newer tissue transplant techniques, discovery of antisepsis and asepsis, and the discovery of anesthesia by such greats as Joseph Lister, Louis Pasteur, Crawford Long and many others.

In 1869, Jacques L. Reverdin, a Geneva surgeon, introduced his so-called "epidermal" or "pinch" grafts to the Imperial Society of Surgeons in Paris. By this method, Reverdin hastened the healing of wounds by the use of small, very thin, detached bits of skin. Ollier in 1872 and Thirsch in 1886 presented their methods of split-thickness skin grafting. The first whole-thickness free graft in humans was done by the Hungarian oculist John R. Wolfe in 1875.

As plastic surgery progressed during the latter part of the 19th century, the need for other transplants and grafts arose. The list of tissues eventually transplanted included bone, cartilage, periosteum, fascia, fat, tendon, muscle, nerve, mucous membrane and cornea.

With the advent of larger and total nasal reconstructions, there arose a need for a suitable nasal framework. One solution was proposed by a Parisian named Rousset (1828) who recommended the use of gold or silver to be molded within the nasal cavity. Others used removable nostril supports made of metal tubes, air balloons, celluloid and various other materials. Non-removable supports were also proposed. In 1877, Despres used a metallic one; in 1878, Lotievant used an aluminum one, and Martin of Lyon used a platinum non-removable support. All of these non-removable supports were inserted by wrapping the flaps around the support. Tissue supports were also used. Ollier (1864) and Buchanan of England (1865) both used periosteum with success. Konig actually used a segment of frontal bone plus a forehead-flap in his rhinoplasties. The first man to use a costal cartilage transplant for a nasal support was von Mangold in 1900. In the same year Keegan, while working in India, improved upon his rhinoplasties by turning in the edges of a flap so as to provide an epithelial lining.

During this era a significant contribution to rhinoplasty was made in this country by Gurdon Buck who published his book on "Reparative Surgery" in 1876. Buck became interested in plastic surgery at the time of the Civil War. At the close of the Civil War, two or three soldiers whose faces had been mutilated by gunshot wounds were sent to Buck for reconstruction. In one of these cases, Buck performed numerous tissue transplants over a period of two years in order to reconstruct the face and nose.

Another example of Buck's rhinoplasty was a Carlton Burgan at the New York Hospital in 1862. Burgan suffered from gangrene and slough of the upper lip, cheek, nose and maxilla following an overdose of mercurial medicaments. A flap from the lower cheek and lips plus a median forehead-flap were used to correct the defect (Fig. 4).

In 1887, John Roe of Rochester, New York, presented his paper on "The Deformity Termed Pug Nose and Its Correction by a Simple Operation." Here Roe describes correction of pug (bulbous tip) nose in five patients via intranasal incisions. In 1891, Roe presented another paper, "The Correction of Angular Deformities of the Nose by a Subcutaneous Operation." This work was significant in that it is the first description



Fig. 4.—Drawings of Gurdon Buck's greatest reconstructive triumph, taken from his book *Contributions to Reparative Surgery*. A. Carlton Burgan as he appeared upon admission to the New York Hospital, December 31, 1862. Gangrene and slough of the right upper lip, cheek, nose and maxilla followed an overdose of mercurial medications. A flap from the lower lip and cheek was rotated upon its vermillion pedicle to reconstruct the rima oris. B. The commissure of the mouth was widened upon the right side by incising the cheek and everting the mucous membrane. C. A median forehead flap was turned downward to cover the defect of the nose. D. Postoperative view of the patient's face following reconstruction.

of hump removal. In 1812, R. F. Weir published his paper entitled "On Restoring Sunken Noses." And finally, J. Joseph of Berlin deserves special mention since he alone practically developed the whole field of corrective rhinoplastic surgery.

Third Period—1914 to 1945

Although the basic principles of rhinoplasty had been established by this time, plastic surgery as a recognized specialty was still in its infancy. At the onset of World War I, only a handful of surgeons were performing any significant amount of reconstructive surgery. Among these, Vilray Blair and John Staige Davis pioneered the work in this country. Sir Harold Gillies and Archibald McIndoe were the English pioneers of plastic surgery. The only full-time plastic surgeon in the United States at the outbreak of the war in 1914 was John Staige Davis.

Due to the circumstances and conditions of World War I (trench warfare involving huge and powerful armies), there was a sudden surge of interest in the development and establishment of plastic surgery. As one may easily imagine, this type of fighting exposed the head and face of the combatants more than any other parts of the body.

Of the significant advances made in rhinoplasty during this period, the procedure of tubed pedicle grafting was important in that it lessened the chances of infection and also provided a mucous membrane lining in restorative rhinoplastic procedures. Although tube grafting was alluded to prior to this time, Sir Harold Gillies, the famed English plastic surgeon, popularized the procedure. Tubed-pedicle grafting influenced the subsequent development of not only rhinoplasty but had a profound effect upon the whole field of plastic surgery.

Although fighting ceased, the impetus to rhinoplasty and plastic surgery offered by the war casualties resulted in the establishment of plastic surgery units all over the United States. However, our English cousins were not so enthused, as evidenced by the fact that there were only five or six full-time British plastic surgeons at the onset of World War II.

Other factors which influenced the evolution of rhinoplasty during the inter-war years included the migration of women from the home to the outside resulting in an increased awareness of personal beauty and physical appearance. Therefore the so-called aesthetic aspect of plastic surgery developed during this era with many "sham" plastic surgeons attempting to profit from this. Since many unqualified surgeons attempted to perform plastic procedures, a hindrance to the development and acceptance of this new specialty was imposed. Even so, many advances and contributions in the field of rhinoplasty were made during this period, with Sir Harold Gillies and John Staige Davis playing prominent roles during these postwar years. Gillies, in a summary based on his experiences in World War I, reported in 1920 on the use of tubed pedicles from the neck and chest.

Injuries incurred during World War II varied from those that resulted from World War I in that trench warfare no longer predominated and injuries to the face were less common. The development of bombs and powerful explosives resulted in severe burns and crush injuries which demanded new techniques in the treatment of burns and newer methods of skin-grafting.

Among the advances in the field of rhinoplasty during these six years were new techniques for flap repairs, skeletal transplants, correction of alar and tip defects and reduction of noses. Actually, many of these advances were merely improvements of procedures previously used by others. Work on skeletal transplants during this era included the use of bovine cartilage in the nose by M. G. Ulloa in 1942 and the use of homogeneous bone and cartilage as reported by many other surgeons. The shape of these transplants, after going through an entire spectrum of designs, ultimately revolved around the use of a one-piece "L" shaped cartilage similar to that reported by J. B. Brown in 1940. Also, during these six years, a significant advance in the correction of alar and tip defects was made by Gillies in his description on the use of full-thickness skin and cartilage from the ear (swung into the defect under a forehead flap). And finally, contributions on the surgical reductions of noses were made by various surgeons.

G. Aufricht presented many improved methods and techniques for rhinoplasty in his book titled "A Few Hints and Surgical Details in Rhinoplasty" published in 1943. Also, by the end of this period there were well organized departments of plastic surgery in all of the major medical schools, hospitals and clinics and there were two recognized organizations of plastic surgeons in the United States.

Fourth Period—1945 to 1969

This 25-year period in the history of rhinoplasty was an era of consolidation of advances and previous achievements. Since the basic principles, techniques and skills of rhinoplasty had been

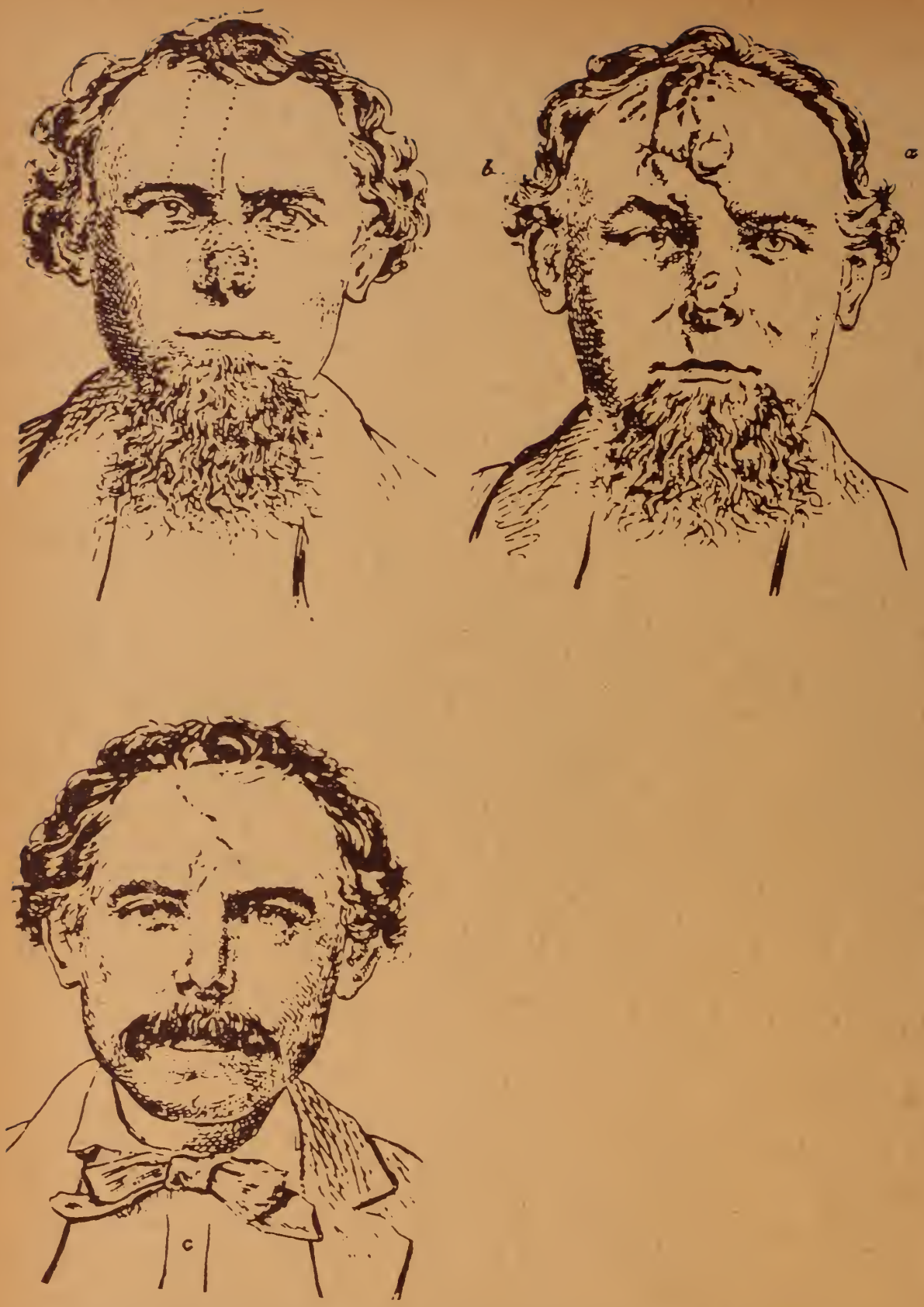


Fig. 5—A. Brutally assaulted, this patient had the tip of his nose bitten off by his assailant. B. Forehead flap rotated onto the nose. (a) and (b) refer to redundant prominences which were removed in (c).

firmly established, plastic surgery now was faced with the task of organization. That is not to say the fields of rhinoplastic and plastic surgery had achieved their ultimate degree of perfection but now rhinoplasty and plastic surgery were no longer in their infancy. They were now well established surgical skills. During this time the British Association of Plastic Surgery was founded, two similar American associations formed and two English journals devoted entirely to plastic surgery were started. Also during this era, numerous new techniques and instruments were evolved and many old procedures were reinvestigated and re-used.

Even from the earliest days of rhinoplasty, plastic surgeons have searched for inert materials in their reconstructive procedures. The use of ivory, acrylic resins, bakelite, metals and paraffin have all been advocated from time to time. In spite of these countless attempts, the satisfactory use of such materials has been largely unsuccessful. Although the initial results obtained appeared excellent, sooner or later the body made an attempt to reject all of these foreign materials. James Calnan with the Experimental Plastic Surgery Unit at the University of London well summarizes the arguments for and against the use of foreign materials. In an earlier article by E. V. Gruzdkova, a Moscow researcher, favorable reports on the use of three plastic materials were documented (polyethylene, polyisobutylene and polyvinylchloride). In the same year, Edward C. Hinds, a surgeon at the University of Texas, reported on the use of perforated tantalum plate in reconstructive surgery. Other synthetic materials recently used in reconstructive rhinoplasty include methyl methacrylate, teflon, vitallium and silastic. Thus, although the ideal material for use in rhinoplasty is still autogenous tissue, the drawbacks to the use of these tissues plus the advantages of the newer synthetics should be considered.

Summary

Using rhinoplasty as a typical procedure of plastic surgery, we have traced 5,000 years of this evolving art and science. The first and longest period in the development of rhinoplasty (3000 B.C. to 1850 A.D.) mainly consisted of attempts at repairing acquired defects resulting from trauma and disease. The second era (1850 A.D. to 1914 A.D.) was highlighted by advances in the fields of tissue transplantation, antisepsis, asepsis, anesthesia and the aesthetic aspects of rhinoplasty. Stimulated by the havoc of two World Wars, the third period (1914 to 1945) not only included many contributions on newer methods of nasal reconstruction but also marked the time when rhinoplasty was no longer considered a rare magical skill performed by a select few. And finally, during the fourth and last era (1945 to the present time), we have not only witnessed the establishment of plastic surgery as a recognized specialty but by tracing the progress of rhinoplasty over a 5,000 year period, we have epitomized the story of the birth and development of plastic surgery.

References

1. Cope, Sir Z.: A. Short History of Plastic Surgery, The Indian Practitioner, (Jan.) 1964, pp. 93-94.
2. Ibid., p. 93.
3. Maltz, Maxwell: Evolution of Plastic Surgery, New York, Fraben Press, Inc., 1946, pp. 36-37.
4. Ibid., p. 1.
5. Ibid., p. 30.
6. Davis, J. S.: The Story of Plastic Surgery, 5th ed., Ann. Surg. 113:646 (May) 1941.
7. Maltz, Maxwell: Evolution of Plastic Surgery, New York, Fraben Press, Inc., 1946, p. 124.
8. Ibid., p. 131.
9. Ibid., p. 184.
10. Ibid., p. 186.
11. Ibid., p. 195.
12. Ibid., pp. 193-194.
13. Ibid., p. 194.
14. Davis, J. S.: The Story of Plastic Surgery, 5tb ed., Ann. Surg. 113:647 (May) 1941.

Other references are available from the author upon request.

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Hospitals and the Practice of Medicine in Spanish Pensacola

Mary Catherine Smith

Sickness and death were constant companions of the early settlers in Spanish Pensacola. Housing consisted mainly of huts with thatched roofs huddled closely together on the sandy strip of beach near the bay and surrounded on the other three sides by low marshy land. The soil was not fertile and very little food could be grown. Wild fruit and game were absent. Drinking water was often the color of saffron. This lack of food, the climate, the water, the quality of personnel, and the delays in subsidy shipments all added to the privations and suffering of the people. Many of the deaths were attributed to malnutrition. The daily food ration consisted of eight ounces of bread or corn and eight ounces of meat without any kind of vegetable or seasoning other than salt water. During starvation periods the men were forced to eat tree roots and acorns.[1]

Very little is known about the personnel of the early attempts to settle Pensacola, but the DeLuna expedition in 1559 undoubtedly had either surgeons or medico-friars attached. We do know that the Arriola expedition in 1698 had three surgeons as members of its complement to care for the 357 persons. One of the friar-surgeons, Fray Joseph de Salazar, wrote that Arriola, "seeing the great lack of facilities for so many sick purchased a house of boards from one of the soldiers for additional hospital space. By the time of this writing, all the medicine was gone and the only cure possible was that of divine intervention."[2] The viceroy was requested to send medicines, sheets, and pillows.

In the early portion of the period, the hospital was manned by the medico-friars of the order of San Juan de Dios, but by 1713 not one of these men remained at the base.

In 1719 the French took Pensacola and held it until 1722. The Spanish returned November 25, 1722. Apparently this break gave the Spanish a chance to regroup and regain some of their strength.

Not much is known about the people of the island settlement, but after their houses were destroyed by a hurricane, the survivors moved to the mainland. By 1757 the fort area with four bastions was marked out and the buildings within this area included a hospital. Again a hurricane struck in 1760 and destroyed all the buildings within the presidio.

The early history of hospitals and the practice of medicine in Pensacola is closely connected with the practice of medicine in the lower Mississippi valley during the Spanish period of 1769-1803.[3] The Spanish had set up a hospital system with two royal hospitals, a major one at Natchez and the largest at New Orleans. Shacks containing a cot or two were located at San Fernando de las Barrancas (Memphis), Nogales (Vicksburg), Baton Rouge, Mobile and Pensacola. Only minor cases were treated at these units and all seriously ill military and government personnel were transferred to the main hospitals by ships of the Mississippi Squadron. By 1777 rules for the administration of the royal hospitals were drawn up and only persons connected with the military and government were to be admitted. However, humane governors and commandants allowed the treatment of civilians until 1791.

In 1797 a Dr. Ellicott joined the hospital system. As protection against fever he used a remedy prepared by Dr. Benjamin Rush of Philadelphia. This remedy was composed of 2 gr. calomel and ½ gr. gamboge combined by the means of a little soap. Dr. Ellicott kept well as long as his supply of pills lasted, but was struck by a fever in 1814 when they gave out.

The physicians and surgeons in the hospital system were English, French, and American. Drs. Samuel Flowers, Charles Todd, Berry Adams, Samuel W. Dorsey, and Charles Watrous practiced in posts from St. Louis to New Orleans. All physicians were required to obtain a license from the

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officials at the cabildo in New Orleans before practicing.

The Spaniards used "Practicantes," a group half-way between the service medic and the intern. These persons were allowed to administer bleedings, vesicatories, cataplasms, plaster applications, fomentations, compresses, collyria, gargles, mouthwashes, dry and moist cuppings, and to supervise the nurses who gave enemas. Andres Jel, a practicante at the Royal Hospital in Natchez who earned 300 dollars annually, also served at Nogales, Baton Rouge, and Pensacola when needed.

Prevalent diseases were recurrent and intermittent fevers, malaria, yellow fever, and inflammation of the eye. Gout and venereal diseases also abounded. Medicines used were Glover's salt, powdered quinine, cream of tartar, LaMar, Storax, digestive unguents, Epsom salts, mercury and vitriol. A Pensacola surgeon, Dr. Pedro de la Puente, in 1796 tried to check syphilitic herpes with tincture of mercury. Olvenza's powder was used for the same condition.

The Pensacola Hospital was built in 1775 by the British, and judging from the recently excavated foundations was a fairly large structure. It was located on the southwest corner of Zarragossa and Adams Streets. The British did much to improve the sanitary conditions by clearing and draining the swamps, digging wells, and moving the outer walls of the fort so as to gain better circulation of air, but they fought a losing battle against the climate and fevers. The British remained until 1781 when Pensacola was again returned to Spanish domination.

By 1799 Vicente Folch y Juan, governor and commandant at Pensacola, included in his military report to the Captain General of Cuba a report of the medical conditions at Pensacola.[4] He gave two reasons for the lack of comfort of the troops in the hospital. The first, a lack of a suitable building for a hospital, and second, the improper distribution of finances. The first floor of a blockhouse, though unsuitable, was used and when the number of patients increased, Folch found it necessary to use the lower floors (or stables) of the barracks. This building was almost in ruins and as a result patients had to lie in water when it rained and were faced with the possibility of the building falling in upon them during storms.

Finances for the operation of the hospital were sufficient but badly managed. Folch, discussing the payroll of the hospital, comments, "The Medical Staff of this hospital is composed of one surgeon who earns sixty-five pesos (a month); a medic (practicante-in-chief with thirty-five (pesos) and another in charge of equipment with twenty-five (pesos). There is likewise a pharmacist who draws fifty pesos a month and an assistant with twenty-five (pesos). In addition, everyone draws a daily ration."[4]

The head medical practitioner, the surgeon, had to care for not only military personnel but civilians as well. Due to advanced years and poor eyesight, this man did not want to attend the needs of the military patients and flatly refused to see civilians during the early hours of the morning. Folch suggested in his report that a new doctor be appointed, and that the job of pharmacist be eliminated by appointing the present surgeon to this position with the stipulation that he appear daily at the hospital and prepare all medications ordered by the doctor. He felt that the reduction in the salary of the surgeon would be offset by the reduction in work and noted that the pharmacist should have been fired long ago due to his addiction to strong drink.

In his report Folch states, "It only remains for me to inform your excellency that not to have a doctor is less harmful than to acquire an ignoramus and since the salary is a good one, and since the town has no other doctor, we ought to bestow the position only on a subject who is well known for his ability."

In 1813 ground was reserved for a national hospital on Lot I, the original location. In 1815 the first recorded apothecary, Desiderio Quina, came to Pensacola and established a shop in his home. The windows and walls were lined with earthenware jars containing various herbs. Dr. Juan Brosanaham, a practicing physician at this time, left a "receipt" book written in Spanish and some English which is preserved today. Many of the prescriptions with some modifications are in use today. When the United States took over Florida in 1821, both Dr. Brosanaham and Quina elected to remain in Pensacola and become citizens of the United States.

References

1. Griffin, William B.: Spanish Pensacola 1700-1763, Florida Historical Quarterly 37:242-262 (Jan.-April) 1959. (Letter, Don Phelipe Serrano y Perea to Senor Don Martin de Sierralta, pp. 248-250).
2. Griffin, William B.: Spanish Pensacola 1700-1763, Florida Historical Quarterly 37:242-262 (Jan.-April) 1959.
3. Holmes, Jack D. L.: Medical Practice in the Lower Mississippi Valley During the Spanish Period. 1769-1803, Alabama Journal of Medical Sciences 1:332-338 (July) 1964.
4. Holmes, Jack D. L.: Medical Practice at Pensacola 1799, unpublished manuscript in the library of the Pensacola Historical Museum.

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The Pensacola Campaign Through a Nurse's Eye

Edited by
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Towards evening the enemy, finding all his efforts foiled, that our guns were not silenced, and McRee not reduced, as he had predicted, turned upon the hospital, and put several shot into the empty building (the sick having all been removed in anticipation of this barbarous act). The evacuation, however, was not known to them. All appearance of occupation was kept up; the yellow flag was still flying. . . . Their ships, both crippled, are withdrawn to their former anchorage, a miserable failure being their reward for commencing an engagement without notice, by firing into houses they knew to be occupied by women and children, and closing it by disgracefully violating the hospital flag, in accordance with a former barbarous threat."[1] This is the account of the bombardment of the military hospital at Pensacola, November 23, 1861, as related in the final report of Major General Braxton Bragg, commanding the Confederate States Army forces.

The "former barbarous threat" referred to by Bragg was a letter from Colonel Harvey Brown, commander of the Union forces, to Bragg on October 9, 1861. Brown pointed out that the hospital and certain other buildings were "directly in front of my batteries" and would "necessarily be exposed to my fire should there be a bombardment." He went on to say, "I therefore give you notice, that the sick, the women, and the children may be removed, so that if fired on, the responsibility may rest where it belongs."[1]

Bragg rejected this notice in a letter dated October 10th and the duel of words was concluded with a letter from Brown to Bragg on October 16th. Obviously annoyed, Brown replies: "You have knowingly and willfully misconstrued my letter (of the 9th), for the evident purpose of having your Christian answer published, so as to make capital with your deluded followers. . . . You knew that in calling to your notice that these buildings would necessarily be exposed to my fire I was influenced by a desire to save the sick, women, and children from danger. . . . You therefore knew that I must either omit to fire on particular batteries of yours or it (the hospital) must necessarily be exposed to my fire. . . . I will do my duty as I construe it, regardless of your calumny and that of the wretch who edits the Pensacola Observer."[1]

When Florida seceded from the Union, January 10, 1861, First Lieutenant Adam J. Slemmer was in charge of Company G, United States Army, at Barrancas Barracks. Word arrived that Florida State troops were enroute to seize the fortifications and Navy Yard in Pensacola harbor. Slemmer soon learned that the Navy detachment was inclined toward the Confederate cause so he withdrew with 81 men and officers to Fort Pickens on the tip of Santa Rosa Island and prepared for the inevitable attack. The Florida State troops occupied the Navy Yard and forts on the mainland without opposition and on January 15, 1861, demanded the surrender of Fort Pickens. This demand was refused by the Union defenders and an armed truce settled over the area.

Even the firing upon Fort Sumter in Charleston Harbor, April 12, 1861, did not disturb the situation at Pensacola. During the spring and a hot summer the Confederates amassed 6,804 men and officers and put them under the command of Bragg while the Union assembled a small fleet of warships and supply ships, strengthened the defenses of Fort Pickens, and placed Brown in command.

The first provocations occurred on the evening of September 2nd when a Federal detachment fired a drydock at the Navy Yard, and on the night of

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The letter reproduced in this article is in the archives of the Sisters of Charity, Saint Joseph's Provincial House, Emmitsburg, Md. A copy appeared in the Pensacola Historical Society Quarterly Vol. 3, July 1967. Permission to reprint this letter has been graciously granted by Sister Eleanor, Visitrix, Saint Joseph's Provincial House, and by Mrs. Daniel B. Smith, editor of the Pensacola Historical Quarterly. We have attempted to reproduce the letter faithfully even in such matters as spelling, punctuation, capitalization and the use of symbols.

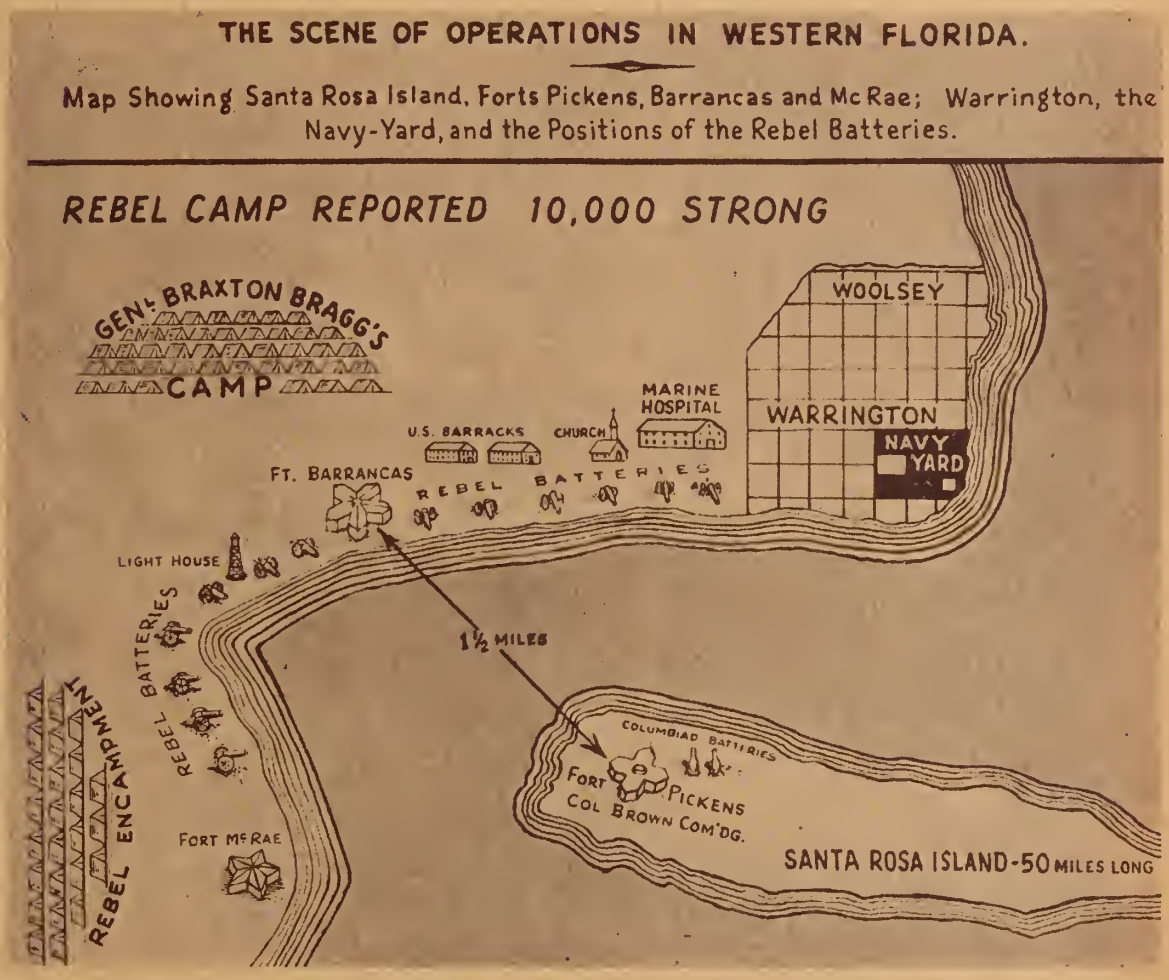
September 13-14th when the Federals in another dashing foray boarded the Confederate schooner "Judah" and put it to torch as it lay at the fitting-out dock of the Navy Yard.

Such provocations could not be ignored, so on the night of October 9th, Bragg landed a force of 1,063 men on Santa Rosa Island four miles east of the fort. Marching west, this force overran the pickets and an outlying battery, but were turned back just outside the fort after a brisk engagement.

This seemed to even the score until the morning of November 22nd when two Federal ships moved into position and began bombarding Fort McRee. Simultaneously the gunners at Fort Pickens began to pour shot and shell into all of the forts and batteries along the shore of the mainland. The Confederates returned the fire and the engagement was interrupted only with the onset of dark and a squall that forced the Federal ships into deeper water.

The next morning at 10:00 the bombardment was resumed with the Federal 10-inch Columbiads and rifled 42-pounders firing one shell every 15 minutes and the mortars every 30 minutes. Again the Confederates returned the fire, though perhaps less effectively than the trained Union gunners. About two in the afternoon the Federals began pouring hotshot into the deserted villages of Warrington and Woolsey, setting fire to the empty houses. Darkness again closed the bombardment, though mortars kept firing occasionally until 2:00 a.m.

Of this engagement Bragg wrote, "For the number and caliber of guns and weight of metal brought into action it will rank with the heaviest



Map of Pensacola Harbor redrawn from the New York Times, November 30, 1861.

(Drawn by Newton Randum, former display artist for the Smithsonian Institution).

bombardments in the world."[2] Yet Bragg reported only seven killed and 33 wounded and Brown two killed and 13 wounded.

A brief but spectacular artillery duel occurred on New Year's afternoon, 1862, then all remained silent in the Pensacola Bay area. Finally, on May 8, 1862, most of the Confederate forces were withdrawn and sent to other areas where they were more urgently needed, and the campaign at Pensacola came to a close. Fort Pickens remained in Federal hands throughout the war but the Federals did not attempt to occupy the mainland.

In the paragraphs above we have seen the engagement through the eyes of the commanding officers and reviewed the historical account. In the following paragraphs we will see the engagement through the eyes of a gentle nun and nurse garbed in a flowing black habit and crowned with a white cornette sometimes smoke-stained from the cooking fire and wilted by rain.

At the urgent solicitation of the Commanding General & surgeon in charge, we started for Warrington, six in number, on the 12th of Aug. [t] [1861] accompanied by the Chaplain. Although the weather was very unfavorable for such an overland route it did not in the least retard our determination to go & to do all in our power for the poor distressed fellows. After traveling all day in an old dilapidated stage & the rain pouring in torrents we found to our dismay that the bridges had all been washed away & no alternative but to return five & twenty miles to an Inn. our lodging was anything but comfortable. we started the next day & met with better success & arrived on the eve of the Assumption. as the surgeon had not been informed of our coming no preparation had been made & we made the best of it. The officers rec[d] us very cordially & offered very kindly to do anything in their power for us or the poor sick.

The hospital stands on an eminence of about a hundred feet & commands a fine view of the Gulf of Mexico Bay of Pensacola & Isle of Santa Rosa occupied by the Federal troops. The scene which met our view was heart rending in the extreme, typhoid fever being the prevailing epidemic among its inmates & sad was the havoc it made among them. Each state had its wards, the Alabamian's were placed in my care. nearly all of them were from the interior & they had little or no religion. the crucifix or the name of Saviour was a mystery to them, although each regiment was accompanied by a minister of one or another denomination & which interest alone induced to remain, they therefore kept a vigilant eye on us for fear we might elude from their group one of those poor souls & bring him into the true fold. They had such a horror of the hospital they thought death was inevitable when once within its walls & would remain in their camps until it was too late assist soul or body but that idea soon vanished when our presence was announced in camps they came in droves & on one occasion over 8 hundred came in with measles & not a vacant bed in the house, they were satisfied to lie on the floor with their knapsack under their poor heads & one blanket for covering, & it fairly alive with vermin & fleas but not a complaint escaped from them. A number of them took other diseases in the hospital & died as they had lived.

The next day being the feast of the Assumption & obliged to hear mass, we set to work to arrange an altar & a rustic one it was, two old boxes and our sheets & two bottles for the candles composed the ornament. After hearing mass and receiving holy communion in that filthy place we partook of some Rye coffe & bread for our breakfast & then started to work for work we had plenty. The poor sick having the same, we had little or no trouble in dispensing it, for all who could partake of that poor fare, were not allowed to remain in bed, they were obliged to decend three flights of stairs to receive their portion. It was heart rending to see them more like skeletons than human beings. The physicians treated them with the greatest indifference. they prescribed without inquiring if their orders were executed or not. A few days after our arrival, I asked the daily physician if he knew that nearly all the fever cases had very serious bed sores & some were fetid & gangrene & two their clothing had grown to their backs. he seemed to be a little astonished, but it ended their with him. on investigation I found for seven weeks they had been lying in same position & without a change



A Sister of Charity attending patients in a Civil War hospital.

(A pencil sketch by a Federal officer prisoner).

of clothing & owing to the fetid smell when removed, we could not induce one of the men to assist in cleaning or purifying their sores. the nurses were not detailed, therefore they done only what suited their fancy. As they were all more or less delirious when brought too the hospital we could absolutely do nothing for their poor souls.

Our good Father to encourage us would say we were sowing seed that would one day yield and abundant harvest. our devotedness had taught thousands the great blessing of knowing & serving God. hundreds of them who seldom or ever thought of their poor souls & knew not what entitled them (the noblest of God's creatures) opened their eyes too their true interests & resolved to search into the truth for the religion which taught such self sacrificing Charity was worthy of investigation, In my wards I merely had two private baptisms & one Communion all died.

One morning at the hour of one, we were aroused by loud & repeated knocks, it was the Chaplain come to tell us to pack & then he would celebrate mass before day. our troops had made an attacked and it was expected the enemy would open fire as soon as it was day.* we were in great suspense on account of our poor sick, as all their guns were pointed directly at the hospital, but it was defered owing to their force being weakened by the attack, One of our troops gave the General as one & his trophys of war the crucifix which he so kindly presented too our little band. the Chaplain to whom it belonged on his bended kneese, begged them to spare his life for God sake. as you profess the same religion as the good sisters we will spare you for they saved many of our lives & that is the least we can do in return.

A few days after as we were engaged given out the supper when we received the word to fly too the woods with all the very sick, as it was to be bombarded. the sick were put into wagons & carried about two miles into the woods with three sisters. At the request of the General three remained at the hospital in order to hide our retreat. from time too time during the day the sisters would pass & repass in front of the enemys fort to let them see the place had not been evacuated. Our abode in the woods were temporary sheds erected in case of an emergency. all the cooking was done by the side of a log or stump, & for weeks we had almost continual rain. our poor sick died one after another from exposure. our sheds were about forty yds apart & going from one to the other our cornets had to suffer and obliged to cook over a few wet embers they were well smoked at times. As it was defered again & nearly all the poor fellows had died that we removed to the woods, we returned to the hospital. We were merely settled when too our astonishment they opened fire on the hospital without the least warning.** our good Father being away our first thought the tabernacle, two sisters removed it too some distance from the danger, one remained to guard it & the rest went to assist in removing the sick, three balls passed through the hospital and one through the clothes room where one of the sisters were engaged in removing the linen but it respected her holy habit & turned to one side it was miraculous as it was such an immence ball & was sufficient to have torn the room to pieces, & now once more we had to take refuge in the woods & where we remained until the evacuation in March. On one occasion they were quite a number came in the hospital sick & when we went into the ward they covered their heads with the blankets & nothing would induce them to uncover them while we were in the ward., for three or four days, as they were so frightened at our appearance or so (skerte) as they used to say. they were very anxious to know to what Regiment we belonged too or if we had been engaged in any battles for if every we were, the yankees would be more afraid of us than any gun the boys could show them. it was laughable to hear them but painful to think there are so much ignorance in this country, that boasts of civilization, living more like savages, than Christians.

* ? Battle of Santa Rosa Island, October 9, 1861.
** ? November 23, 1861.

Nursing responsibilities in those days included duties now assigned to the dietician, cook, chaplain, laundress, porter, "gray ladies" and supply officer as well as bedside nursing. Often the nurse had to forage for food and bedding for her patients and herself and see that these were transported to the hospital. The dressing of wounds in those days of "laudable pus" required a strong stomach and cologne was in great demand to suppress the odors of the hospital wards. All in all, nursing was not for the faint of heart and queasy of stomach.

At the onset of the Civil War, there were very few skilled nurses available to either army. In the society of that day nursing was largely relegated to the lowest class of women, street walkers and charwomen. Indeed, the first nurses training school in the United States did not open its doors until eight years after the war ended. As a result and by necessity, most of the nursing in the hospitals of both armies was done by soldiers detailed as hospital attendants. Often these men had little aptitude, inclination or training for nursing. Men of the Confederate Army who were too disabled to fight were commonly detailed to the hospitals. Disgruntled that they had not been discharged or furloughed, they often made little effort to perform the services expected of them for they knew they could not be returned to the fighting front. Negro slaves were also used in many Confederate hospitals with varying degrees of effectiveness. Women volunteers, often women of station such as Mary Martha Reid, wife of a Florida governor and matron of the Florida Hospital in Richmond, played a significant role. These ladies whose chief qualifications were intelligence, energy and dedication, were important not only in nursing the wounded of the Civil War but also in establishing nursing as an honorable profession during the postwar period.

The only considerable body of ladies with specialized training in nursing at the outset of the war was certain Catholic Sisterhoods devoted to the care of the sick. Chief of these "nursing orders" were the Sisters of Charity, the Sisters of Mercy, the Sisters of St. Joseph, and the Sisters of the Holy Cross. Of the Sisters of Charity there were three orders: "black caps" or Mother Seton Sisters, the "white caps" or Cornette Sisters of Emmitsburg, Md., and the Sisters of Charity of Nazareth, Ky.[3]

The nun whose letter we have herein published belonged to the Cornette Sisters. This group, the first of the nursing orders to become engaged in nursing Civil War wounded, responded to a call from the Military Hospital in Richmond as early as May 16, 1861. Subsequently, in response to calls from both armies, they served at Frederick, Harper's Ferry, Washington, St. Louis, Norfolk, Montgomery, Pensacola, New Orleans, Shiloh, Manassas, Antietam, Atlanta, Gettysburg, and many other places. In all, more than 300 of the Cornette Sisters served the armies between 1861 and 1865. Of their services at Pensacola, Bragg wrote in his final report, ". . . to Father Pont and our good Sisters of Charity, who have labored in our hospital without money and without price, the Army and the country owe a debt of gratitude."[1]

Finally, from an eyewitness in a hospital in Washington comes a beautiful tribute to the nursing nuns:

"Of all the forms of charity and benevolence seen in the crowded wards of the hospitals, those of some Catholic Sisters were among the most efficient. . . .

"Gentle and womanly, yet with the courage of soldiers leading a forlorn hope, to sustain them with such horrors. As they went from cot to cot, distributing the medicines prescribed, or administering the cooling, strengthening draughts as directed, they were veritable angels of mercy."[4]

References

1. Secretary of War: The War of the Rebellion, A Compilation of the Official Records of the Union and Confederate Armies, Series I—Vol. VI, Washington, Government Printing Office. 1882.
2. Bearss, Edwin C.: Civil War Operations In and Around Pensacola, Florida Historical Quarterly 36:125-165 (Oct.) 1957.
3. Barton, George: Angels of the Battlefield, A History of the Labors of the Catholic Sisterhoods in the Late Civil War, Philadelphia, The Catholic Art Publishing Co., 1897.
4. Chittenden, Lucius E.: Recollections of President Lincoln and His Administration, New York, Harper & Brothers, 1891.

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Health and Medicine in Key West 1832 - 1845

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From the time of its occupation by the United States early in 1822, Key West was thrust into the military and commercial considerations of the federal government. Its proximity to Havana, nerve center of the Spanish Caribbean, and location of the much-traveled Florida Straits marked it as a logical port of entry. Accordingly, a custom house was established in 1822, but the town was not officially designated as an entry port until more spacious quarters were obtained in 1828. Of even more importance, however, Key West was the most convenient outpost from which the United States might operate a system of military defense against the notorious piratical ravages, which in the early years of the 19th Century had rendered the Caribbean unsafe for ordinary shipping and provoked cries of outrage from the commercial interests who bore the losses. Medical affairs in Key West were, therefore, not the exclusive concern of the citizens of the town, but for many years claimed the attention of certain Washington agencies and demanded a measure of cooperation between civil and military authorities.[1]

Progress in Spite of Fever

By 1832 Key West had weathered its most serious health crises, catastrophes brought on by repeated onslaughts of yellow fever and complicated by the absence of medical facilities and remoteness from sources of medical and food supply. Later years would, of course, witness deadly recurrences of the dreaded fevers, but none was to wreak such total desolation of body and spirit as those of the 1820's (1826, in particular), when the island was virtually abandoned. A report of May, 1826, estimating the total population of the settlement at 10 persons was probably not greatly exaggerated.[2] Within the next three years the town made a substantial recovery, but in the summer of 1829 the fever returned in unusually virulent form. Dr. Benjamin Strobel,[3] the young Charleston physician who was to make Key West his home for about three years, arrived in late September. His recollections reflect the general gloom which had settled over the island.[4]

> I arrived at Key West during the sickness of the year 1829. My entree was not, therefore, calculated to impress me very favorably, either with the place, or its inhabitants. But few had escaped the prevailing fever . . . , a large number of persons were then sick, whilst those who had recovered, exhibited a most cadaverous aspect. I must confess that my ardor was somewhat checked, when I saw a number of wretched looking people crowding down the wharf to enquire the news.

Elsewhere he wrote,[5] "Key West was undoubtedly very sickly in the year 1829. A large majority of the inhabitants were affected by the bilious remittent fever, and many died."

By 1832, however, there was no longer much doubt that Key West would survive. The army had subdued its apprehension concerning the healthiness of the island and early in 1831 had reestablished a post there.[6] Under a new charter, granted by the legislative council of Florida on February 2, 1832, the town was permitted to elect a health officer and port physician,[7] and the legal groundwork for public health legislation was laid. On July 24 quarantine regulations were enacted by the town council and the health officer was empowered to enforce them. Respectable elements were apparently accepting their civic responsibilities and giving the community a civil and moral purpose. Early in 1832 the Tallahassee Floridian expressed its happiness upon learning "that Key West has been remarkably healthy during the past season." It added: "This place is in a very flourishing condition, judging from a recent sale of lots. One lot with buildings of but little value brought $5000. Another lot sold for $2500 without improvements. The woods lots in the back part of the town varied from $80 to $200."[8]

Civil and Moral Responsibilities

Still the disrepute of the earlier years could not be forgotten. A fear of "Key West Fever," synonymous in some parts with yellow fever, discouraged many would-be settlers and business venturers and convinced Northern invalids that the salubrious climate of Key West was to be

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enjoyed only at enormous risk. The inhabitants themselves were not without fear. Such anxieties prompted Dr. Strobel, editor of the Key West Gazette, to issue frequent reassurances and print advisory bulletins on the preservation of health. One of these, published on July 18, 1832[9] at the advent of the "sickly season," had been delivered orally to members of the town council in April of that year by its author, Dr. Henry S. Waterhouse, one of the island's physicians. The councilmen were reminded that the legislative council had conferred upon them the authority to enact and enforce health ordinances. Dr. Waterhouse then outlined a program which, in his opinion, would reduce the probability of introduction of contagious diseases. He urged the immediate appointment of a health officer[10] whose duties would include regular inspections of vessels coming into port "whenever and as often as might be thought necessary." Concerned as he was about the "deleterious miasmata" arising from putrifying vegetation in and around the town, Dr. Waterhouse urged the town council to complete the drainage of the foul pond which spread across the town,[11] and which had been repeatedly blamed for much of the sickness among the inhabitants.[12] Many other routine sanitary precautions were suggested.

Turning his attention to the indigent ill, of which Key West appears to have had an unduly large number, the doctor proposed, "For this class of people, something in the nature of a dispensary, or rather a town hospital, together with the necessary medical attendance, medicines, nursing, food, hospital utensils and conveniences ought to be furnished." It was more than a decade later that this latter need was in some degree met by the building of the Marine Hospital. The ordinances adopted by the town council in the summer of 1832 indicate that it was not unmindful of the physician's advice.

In similar vein the Gazette on April 18, 1832, after remarking upon the exceptionally healthy conditions of the previous two years, cautioned its readers that "This circumstance, however gratifying and encouraging, should not induce us to remain inactive, or to neglect those precautional means which are either calculated to destroy the sources of disease or to mitigate their action." The author, presumably Dr. Strobel, then proceeded to outline the causes of disease as they affect the individual and the community. High in the first category he placed intemperance, especially the intemperate use of "ardent spirit, the most fatal of all kinds of excess." In support of his pronouncement the author invoked the support of several medical authorities of the times.

In the Gazette of July 25, 1832, Dr. Strobel was joined by three other Key West citizens in an appeal to the people to observe the basic precautions.[13] The proper care of privies, avoidance of contamination in food and drink, and practice of temperance were emphasized. Reflecting the prevailing medical thinking of the period they warned: "Excessive fatigue should be avoided. The intense heat of the sun, and chills at night, are highly prejudicial: therefore shun the excessive heat of the sun by day, and return home early at night, so as to escape its damp and dews."

Time of Better Health

There is little doubt that Key West enjoyed better health in the years 1830-1834. After the high mortality of 1829 (49 deaths), the next five years had deaths as follows: 1830 (14), 1831 (21), 1832 (22), 1833 (27), 1834 (30).[14] The year 1835 witnessed a further decrease in the number, in spite of a yellow fever outbreak. The evil reputation of 1835 among Key West chroniclers seems to derive in part from the reminiscences of Dr. Joseph Y. Porter,[15] who recalled that his maternal grandfather, Captain Thomas Mann Randolph, commander of the U.S. Revenue Cutter "Washington", had been a yellow fever victim. Dr. Porter wrote, ". . . a severe epidemic of yellow fever occurred on the Island in 1835." But the Key West Enquirer, which appeared without interruption throughout the summer of that year, made no mention of the epidemic. On the contrary, its issue of October 3, 1835 noted that "the summer has passed away, and our island has fully preserved its credit as a place of health." On October 24, 1835 the Enquirer presented the opinion of William A. Whitehead[16] that, for the invalid, Key West was unsurpassed in climate, lacking only facilities for their proper care. This, he hoped, would soon be remedied by the building of inns and boarding houses. The same newspaper, which had altered its name with the issue of December 19, 1835 from Enquirer to Inquirer, on January 9, 1836 published a health report for the year 1835:

> Deaths at Key West, exclusive of United States soldiers, during 1835.
>
> [Causes of death] Casualty [?], 1; Intemperance, 1; Cancer in Stomach (supposed), 1; Consumption, 3; Measles, 1; Dysentery (chronic), 1; Visceral Derangement, 2; Fever, Bilious, 2; Total, 13. Of which there were Infants 2, Adults 11, Residents 9, Non-Residents 4. Estimated average population, permanent and transient, 600. Rate of death, 1 in 46.

Whitehead's report perhaps does not convey the full story in that deaths among military personnel and transient mariners may not be included. In another report which as Collector of the Customs in Key West he submitted to the Treasury Department, Whitehead recorded only three deaths among the transient mariners whose medical expenses were paid from the Marine Hospital Fund.[17] It is conceivable, to be sure, that yellow fever was widespread, but two deaths among 600 persons could not constitute a severe epidemic. A further statistical uncertainty arises from the presence in Key West of persons seriously ill upon arrival. The obituary notices of many Florida newspapers of the 19th Century reveal that many arrived only in time to become mortality statistics. Key West had its share.

Damaging Publicity

Those persons with a stake in the success of Key West, especially those with financial involvement, continued to combat the unfavorable publicity so wilfully, even eagerly, circulated in other parts of the country. In February, 1836, Whitehead wrote:[18] "The health of the Island has elicited perhaps more misrepresentation than any other subject connected with it." He then went on to deplore the misstatement of fact incorporated into a report made to the Navy Department by two youthful officers dispatched to Key West and Tortugas late in 1829 to survey the conditions of health. The officers, Lieutenants Tatnall and Gedney, had observed officially, "the health of this year [1829] may be considered as a fair criterion by which to judge it generally; . . . . At Key West the mortality has been so great that sixty-five of the inhabitants died out of one hundred and fifty, and of the whole population only a few escaped sickness entirely." The egregious report provoked Whitehead to reply:[19]

> It is true that the year 1829 . . . was marked by more disease than is usual; . . . but it has been satisfactorily ascertained that only forty-nine persons, residents and non-residents, died upon the Island during that year, of all diseases.
>
> We are at a loss to imagine where the two gallant officers who made the report could have obtained their information, and deeply regret that they should have placed such reliance upon its truth as to have incorporated it in their report. The estimate of the population is also extremely below the mark, for we doubt much that there has been any year, since the first few years subsequent to its settlement, that the average population has fallen short of 500.

Improving Health Conditions

On the other hand, there is evidence that confidence in the future of Key West was gradually reviving. Writing to the Enquirer in November, 1834, H. K. Newcomb, for some years a resident of Key West, called attention to the excellent health record for the previous summer. This he ascribed, in part, to the draining of ponds and the clearing of undergrowth for which the mayor and aldermen were commended. He noted also that many handsome dwellings had recently been built; that a nice court house and a new jail had been added. Then he concluded: "Many residents have returned from the North and seem pleased to be home again. We are in truth right glad to see them. . ."[20] Just two weeks earlier the Enquirer had called attention to the arrival of cooler weather and its salutary effects on the "sick strangers abiding amongst us."[21] A measure of confidence was manifested late in 1834 when Captain Edward Glover opened a bath house on Whitehead Street. The establishment, equipped to provide Whitlaw's Patent Vegetable Medicated Vapour Baths, was welcomed by the Enquirer on November 1, 1834 with the hope that "these celebrated baths may have a fair trial, and if successful, Captain G. may receive a liberal share of public patronage." An accompanying advertisement listed 23 categories of ailments known to have been lessened by the use of these baths.[22] The fate of the venture is not recorded.

The conditions of health in Key West continued to improve in the later 1830's. An unidentified invalid, who spent the winter of 1838-39 in the West Indies and Florida, wrote anonymously of Key West as it appeared to him in March, 1839.[23] The mosquitoes and sand flies he found extremely irritating, and the March winds had sent the temperatures down into the sixties—much too chilly for the comfort of a sick man—but in general the bad reputation of Key West was undeserved. He wrote: "The experience of upwards of five hundred inhabitants for several years, with great freedom from fevers of all kinds, and with rarely a case of ague, even by the intemperate, has not only repelled the charge, but brought it [the town] into high estimation as a place of extraordinary salubrity."[24] He concluded his inventory of the town's principal features with the reassuring information that "There are two physicians here, of good reputation, and their charges are not very high."[25] He noted the presence of several invalids, among them two from Pensacola and one from New York. They professed to have found very great benefit from the climate, and "all appeared to think it the best in the United States, if not in the world." His final note on Key West is not

without significance: "But there was not a single case of entire recovery among the whole [of the invalids]"[26]

Florida's Largest Town

It becomes apparent from occasional references that in spite of the acknowledged improvement in living conditions, the absence of serious epidemics, and the attending restoration of confidence, Key West experienced no appreciable increase in population in the decade 1830-1840. In the Fifth United States Census, compiled in 1830, the population of Monroe County was reported as 517. Of these, we may assume that more than 400 were residents of Key West.[27] Walter C. Maloney recalled that in 1835 "Mr. Whitehead estimated the population at 600." But, continues Maloney, "If my recollection is correct, an enumeration of the inhabitants was taken in 1835, which gave the total resident population at 582." The federal census of 1840 reported only 688 people in Key West. This was an increase of perhaps 250 for the decade. The 1850 tabulation, however, shows 2,645, an increase of about 400%. One may conjecture that the slow growth of the 1830's was due in large measure to fear of illness and lack of facilities for caring for the sick. But the anxieties aroused by the Second Seminole War cannot be overlooked. To many persons living north of the Georgia border, Key West appeared to be vulnerable to Indian attack and the well-publicized massacres of whites in southern Florida confirmed their fears.[28] And indeed there is evidence that Key West citizens were alert to the dangers.[29] Whatever the explanation of its slow growth in the decade of the 1830's, the fortunes of Key West took an upward turn in the following ten years. With its almost 3,000 people in 1850 it was Florida's largest town.

The Ailing Transient

Throughout the territorial period (1821-1845) the ailing transient was a serious medical problem in Key West. Petitions, depositions and complaints, originating with citizens of the island, were forwarded again and again to federal and territorial agencies. The pleas were much the same. They called attention to the unfortunate ones cast ashore on the island, penniless and ill, by the vessels plying the waters of the Straits. They deplored the inadequacy of the Marine Hospital Fund,[30] which was the only public device for aiding the indigent sick. The petition, drawn up by William A. Whitehead and published in the Enquirer on October 3, 1835 was typical. Key West, he reminded his readers, was so situated as to become a "receptacle for the sick of vessels leaving the ports of West Florida, Alabama and Louisiana," with none [no port] "between Charleston and Pensacola possessing the superior attraction of a hospital."[31] Therefore "seamen are brought here sick to be left to the care of strangers, dependent upon private charity (there being no municipal regulations for their support), and the hospital fund of the United States for their nursing and subsistence."

The problem had become especially acute in the interim between withdrawal of the naval personnel in April, 1826 and arrival of the army's contingent late in 1831. Even later there was little relief. Medical officers for the Key West post, considered one of the least desirable anywhere, were very difficult to obtain and the Office of the Surgeon General was hard-pressed to find medically-trained men for assignment. Although military commanders throughout the United States had been authorized to employ civilian surgeons when others were not available, the civilian surgeon was in short supply in Key West. There is substantial evidence that the people of Key West did as much as possible to deal with the problem, but the demands on their charity and their resources were far too great to be adequately met. The following letter, addressed by Key West citizen James Davis[32] to Adam Gordon, Collector of Customs, on September 24, 1843 suggests the spirit of despair in the hearts of some Islanders.[33]

> Sir: I wish to call your attention to the condition of the marine hospital [fund] in your district. The mode in which the fund for the relief of sick and indigent seamen is distributed, appears to me defective in the extreme, and ill calculated to effect the object for which it was designed. [These defects are:] Three dollars per week are paid for hoard and nursing, and thirty-seven and a half cents for medical attendance and medicines [per diem]; and this last for but twenty-five days. Now, in many cases, this is perfectly inadequate to afford much, if any, relief to sick seamen. To be sure, three dollars per week will afford shelter, and sometimes necessary food, but nothing else. Common board and lodging on this island being, as you know, six or seven dollars per week, the necessary medical attendance is given, and would he if there were no hospital fund; hut there is no one to see that medicines are properly administered, hecause no one would give his time and attention for the sum allowed; and frequently a patient passes a night of misery without a drop of water to cool his parched tongue; and I boldly assert that many persons die for want of proper nursing. I would not wish you, sir, to infer from anything that I have written, that hospital patients are neglected by me. They shall have all the medical attention necessary, and will continue to have, so long as I have charge of them. But still, I am not allowed the one-tenth part of the usual compensation paid by citizens for medical attendance. The allowance of twelve and

an half cents per day for medicine, will not, in many cases, defray one-quarter part of their cost. Medicines are sold here at a high rate; and physicians' prescriptions are commonly put up by druggists, and charged to the physician. At times, being unable to obtain board for the price allowed, it is extremely difficult to procure a place of shelter for sick seamen; and often patients lie for days in a piazza or deserted house, with scarce one to visit them except their medical attendant.

Physicians in Residence

Information relating to the actual presence of physicians in Key West during the period covered by this paper is meager and incomplete.[34] It appears, however, that there was seldom a time when there was not a physician, either civilian or military, in residence. An examination of Surgeon Generals' records for the period indicates that assignments were frequent and that tenure was sometimes of short duration. As for civilian physicians, the paucity of newspapers for the period[35] renders it impossible to detect their presence on the island or the length of their sojourns. Does the advertisement of an unclaimed letter at the Key West post office addressed to Dr. H. Taliaferro (South Floridian, November 10, 1838), or another addressed to Dr. J. T. McLaughlin (*Ibid.*, August 24, 1839) suggest that either of these men was ever resident of Key West? If so, for how long? There is sufficient evidence, however, to establish the existence of at least two physicians in the town for much of the period under consideration. The Inquirer of April 16, 1836 reported the election of Dr. Dan Platt to the city's board of aldermen, the election having been held on April 4. The South Floridian of November 10, 1838 contains a single reference to his residence as of that date, while the 1840 United States Census shows him a resident of Key West and lists his age as between 40 and 50.

The other physician was Dr. John Loomis Blodgett, presumed to have gone to Key West late in 1838 and to have remained there until near the end of his life in 1853. The Census of 1850 gives his age as 41 and Connecticut as his place of birth.[36] A letter written by Adam Gordon and dispatched to Thomas Ewing, Secretary of the Treasury, if accepted at its face value, would cast some doubt upon the medical ethics of Dr. Blodgett. Such a judgment should perhaps be withheld, however. The letter nevertheless offers interesting information on the arrangements of medical practice in Key West at the time and for that reason is presented at this juncture.[37]

Collector's Office, Key West
September 15, 1841

Sir: Soon after the reception of your circular of the 15th May last, and the supplement thereto, I made agreement with Dr. J. Blodgett to attend the sick seamen on the terms prescribed in the circular. He, however, declared that the terms prescribed therein would not purchase the medicine; but he would engage for one quarter, under the belief the price would be found inadequate, and would be raised. About the time Dr. B.'s quarter commenced, a severe and desolating sickness broke out on tbe island.[38] It was the yellow fever, with black vomit. Dr. B. removed himself and family suddenly from the island, and left the seamen without medical treatment. The other physicians[39] rendered their services, and the citizens, by voluntary contributions, raised a fund of $400 to aid the seamen and poor, and alleviate their condition. These physicians have charged for the present quarter the rates prescribed in your circular, saying they cannot afford to lose the whole of the medicines they have charged. But they expressly declare they will not hereafter attend the seamen on the marine list for the sum stated in the circular. The lowest sum offered by either of them is one dollar per day for each seaman for medicines and attendance. Under these circumstances, what can I do? . . . There have been great suffering and mortality among this class of men. As usual, but a small portion of them are employed in this district, while most of them are from passing vessels. The ship Mary Francis, from Mobile to New York, has been several days in port. with eleven sick on board, including the master and both mates; six other vessels have put in with their sick, which embraced the majority of each crew. Our port is so situated as to induce passing vessels to seek relief for their sick here, and it is out of my power to extend any substantial aid. A marine bospital, located on this island, would be the means of saving more seamen than at any otber point on tbe whole coast. As I can get no physician to attend the sick, and as the seamen, from tbeir known improvidence, have seldom the means of helping tbemselves, I deem it proper to lay the whole matter before the department. . . . Your obedient servant, A. Gordon

Construction of Marine Hospital

It may be noted that pressure for construction of a marine hospital was mounting. Gordon's letter was followed in November by presentment from the grand jury of Monroe County to the judge of the Superior Court imploring him to join them in petitioning the Florida Legislative Council as well as the Congress of the United States for a marine hospital appropriation. The urgency of the situation was once again set forth. The grand jury recalled the deplorable conditions of the past [1841] summer when "a large sum of money was raised by subscription to support the sick and bury those who died at this port." The presentment further stated that in many instances "many vessels put into port with their entire crews sick, but could not find that relief which they had a right to expect, on account of the want of a hospital. The citizens were necessitated to hire a building, attendance, &c., and appropriate it for that purpose, and support the sick at their own private expense. Humanity called for it, and it was done."[40]

Supporters of the hospital cause were relentless. In 1843, 51 citizens of Key West addressed a petition "To the Honourable the Senate and House of Representatives of the United States in Congress assembled" once more stating their grievances in forceful terms, supplying the details of the wretchedness which characterized the summers of 1841 and 1842, when "the yellow fever prevailed here to a considerable extent; but was mostly confined to seafaring persons. Last summer [1842] it was introduced by landing a seaman, sick with yellow fever, from a wreck. The seaman died in the heart of town—there being no hospital to remove him to—and the yellow fever soon after spread to an alarming extent among others." In closing, the undersigned respectfully prayed "that Congress will make an appropriation for the building of a marine hospital on this island."[41]

Finally, in 1844, the pleas were heard and official action to provide the legal groundwork was begun. On April 2 of that year the House Committee on Commerce recommended establishment of a Marine Hospital at Key West and submitted House Bill No. 303 to that end. The bill was enacted on June 15, 1844.[42] The site chosen lay along the main shipping channel facing the sea, on Emma Street at the foot of Fleming Street. A letter from Adam Gordon to the Treasury Department, dated December 16, 1844, certified that John W. Simonton, contractor for the building, had landed the materials and furniture for the hospital and had presented his invoices to the amount of $13,183.17 for collection.[43] Gordon added that the basement story was nearly completed. It was opened for use on August 2, 1854.[44]

Frontier Humaneness

The construction of the hospital must be regarded as a milestone in the history of health and medicine in Key West. But by no means did it eliminate the health problems. Yellow fever was to continue to plague the citizens for many years, but never again was it to assume the proportions of the epidemic of 1829. The remoteness of the island, in the light of 19th Century transportation, reduced the number of physicians willing to settle there, while the limited supplies of medicines and nourishing foods probably increased the hazards of ordinary illnesses. And yet Key West seems to have made out about as well as other Florida towns. When the crises attendant upon illness descended on the town, the people came forth as they usually do in frontier situations to display their humaneness in many practical ways. Mrs. Mallory, mother of Senator Stephen R. Mallory and presumably the first woman settler in Key West, endeared herself to innumerable islanders by her care in time of illness, while George Alderslade, a bluff and crusty tavern-keeper of robust build, earned the affection and admiration of his fellow men by his willingness to help in time of need. A Key West chronicler of later times recalled him as a man "of good judgment, fine mind and a heart of size proportionate with his body. He was the best yellow fever nurse in Key West, and gave his time free to those afflicted with that dread disease."[45]

Notes

1. This paper is to some extent a continuation of a similar work read before a meeting of the Florida Historical Society in Key West on May 6, 1967 and subsequently published. See E. Ashby Hammond, "Notes on the Medical History of Key West, 1822-1832," Florida Historical Quarterly, XLVI (Oct. 1967), 93-110.
2. East Florida Herald (St. Augustine), May 23, 1826.
3. Dr. Benjamin Beard Strobel (1803-1849), a graduate of the South Carolina Medical College in 1826, arrived at Key West in September, 1829. He was an active and civic-minded citizen of the town until late in the year 1832. He was surgeon of the Key West army post and port physician. He returned to his native Charleston and practiced his profession there, except for brief absences, until his death in 1849.
4. Charleston Courier, May 10, 1837.
5. Ibid., May 13, 1837.
6. American State Papers, Class V, Military Affairs, IV, 202, 206-7.
7. Dr. Strobel was immediately appointed to both offices. Key West Gazette, March 14, 1832, July 25, 1832.
8. Tallahassee Floridian, January 3, 1832.
9. Key West Gazette, July 18, 1832.
10. Dr. Strobel was elected to the office on April 7, 1832, ibid., April 11, 1832.
11. Key West records contain frequent references to this "foul pond." Its precise location may be seen on Key West maps of this period. It was a depressed area beginning at the shoreline between Front and Greene Streets and spread across Duval Street as far as the corner of Whitehead and Carolina Streets. It appears that at high tide seaweed and other vegetable matter would be swept into this pocket where it subsequently decayed, sending foul odors throughout the settlement. It was assumed, of course, that effluvia emanating therefrom contributed greatly to the unhealthy conditions of the island.
12. An "Invalid," writing about his sojourn in Key West in 1839, noted that the pond was still there. See note 23, *infra*.
13. The three citizens were Oliver O'Hara, Edward Chandler and Alexander H. Day, the last a doctor of medicine.
14. These figures, in addition to other statistical information relating to causes of death, were compiled by William A. Whitehead, probably in January, 1835. The manuscript containing the statistics may be seen in the University of Florida's P. K. Yonge Library of Florida History. It is located in the bound volume of the Key West Enquirer. Dr. A. W. Diddle included these statistics in an article, "Vital Statistics Compiled in Key West During 1835," Journal of the Florida Medical Association, XXX, No. 9 (March, 1944), 380-382. The mannscript indicates that it was Dr. Henry S. Waterhouse who made the compilation for the years, 1829-1833 and that Whitehead simply added the figures for the year, 1834. In the Gazette of April 25, 1832 Dr. Strobel had printed the figure for the year, 1831. His total of 21 deaths agrees with Whitehead's figure and is probably the source for that year for both Whitehead and Waterhouse. It would appear that Diddle is in error in ascribing the compilation to J. R. Mallery [*sic*]. He doubtless intended it to read Stephen R. Mallory.
15. Joseph Y. Porter, "Looking Backward over Fifty Years of Health Work in Florida," Journal of the Florida Medical Association, July, 1925-January, 1926. Dr. Porter was born in Key West in 1847 and had often heard from his mother and grandmother (Mrs. Randolph) the tragic story of Capt. Randolph's demise. It was some years after his retirement from his position as State Health Officer, in which he served with great distinction from 1889 until 1917, that he wrote his reminiscences.
16. William Adee Whitehead (1810-1884) and his older brother, John Whitehead, were early settlers and civic leaders in Key West. William A. left Key West in 1838 to spend the remainder of his years in New Jersey.
17. The Marine Hospital Fund was the sole formally authorized source of aid for ailing and indigent mariners stranded in the seaports of the United States. In Key West the ad-

ministration of the fund was the responsibility of the Collector of Customs, who regularly reported disbursements to the Treasury Department. In many ports the allowances of $3 per week for board, lodging and nursing and 25 cents per day for medical services might have been sufficient to provide minimal care. In Key West, however, where prices were generally a third to a half higher, it seems to have been woefully inadequate. This disparity was the source of much complaint from the citizens of the town.

18. Key West Inquirer, February 20, 1836.
19. Ibid. Figures contained in the Fifth U.S. Census, 1830, support Whitehead's claim. They show a population of 517 for Monroe County, more than 400 of whom may be assumed to have resided in Key West. Nor does there appear to be any reason to question the mortality figure of 49 for the year, 1829, cited in Diddle, Op. cit. See note 14, *supra*. The comparatively large and fluctuating transient population of Key West was often a source of trouble for the census taker.
20. Key West Enquirer, November 8, 1834.
21. Ibid., October 22, 1834.
22. The list included nervous irritability, scrofula, ulcers, croup, gout, cholera morbus (always cures), hydrophobia, palsy and cancer.
23. An Invalid, A Winter in the West Indies and Florida (New York, 1839), pp. 115-136.
24. Ibid., p. 119.
25. Ibid., pp. 121-122.
26. Ibid., p. 131.
27. See note 19, *supra*. See W. C. Maloney, A Sketch of the History of Key West, Florida (Newark, 1876), p. 17.
28. A shockingly brutal attack on the family of a Mr. Cooley, who had settled on the New River at a point which would presently lie within the city limits of Ft. Lauderdale, was given wide publicity. Cooley returned home on January 6, 1836 after a brief absence to find his wife, children and children's tutor slaughtered. (For details, see M. M. Cohen, Notices of Florida and the Campaigns [Charleston, 1836], pp. 79ff.) A similar fate befell Dr. H. B. Crews, who had gone from Key West to Charlotte Harbor early in 1836. His murder occurred about April 10th of that year. See Key West Inquirer, issues of April and May, 1836, for details.
29. In the recollections of William A. Whitehead, written some 40 years later, mention is made of the organization of night patrols by the citizens of Key West. Thelma Peters, ed., "William Adee Whitehead's Reminiscences of Key West," Tequesta, XXV (1965), 17. Key West was still uneasy from the Indian threat as late as 1840. Prompted by the murder of Dr. Henry Perrine at Indian Key, the Territorial Governor of Florida, Robert R. Reid, sought more adequate protection from the Navy Department. This was promised by Navy Secretary Joel R. Poinsett in a dispatch of September 10, 1840. C. E. Carter, comp. and ed., The Territorial Papers of the United States (Washington, 1962), XXVI, 213.
30. See note 17, *supra*.
31. Key West Enquirer, October 3, 1835. A more complete version of this petition was included by A. W. Diddle in his article, "Medical Events in the History of Key West," Bulletin of the History of Medicine, XV (May, 1944), 447.
32. I am unable to provide precise identification for James Davis. From the context of his letter one might conclude that he was a medical practitioner. It is possible that he was one of the physicians referred to by Adam Gordon in a letter to Thomas Ewing, Secretary of the Treasury, dated September 15, 1841. See note 37 infra. See also Territorial Papers, XXVI, 855, where his name appears in a list of Key West petitioners, suggesting that he was a non-military resident of the town.
33. House Reports, No. 396, 28th Congress, 1st Session, pp. 5-6.
34. Documents relating to the administration of the Surgeon General's office provide names of medical men appointed to the Key West base and dates of appointment. Beyond this little is known about their service on the island.
35. One can only deplore the failure of Key West newspapers for the period 1836 to 1845 to survive. With the final issue of the Inquirer, printed on September 17, 1836, Key West had no newspaper until early 1838, when a paper, even the name of which is unknown, was published. No issues have survived. The South Floridian began publication on June 30, 1838 and continued until late 1839, but only two issues are extant (November 10, 1838; August 24, 1939). The Light of the Reef was published in 1844, but no issues exist. The Key West Gazette began publication in 1845, but only two issues (those of December 6 and 13) are in existence. Thus the researcher is bereft of one of his most important sources for local history.
36. R. Bruce Ledin, "John Loomis Blodgett (1808-1853)," Tequesta, XIII (1953), 23-33. This article, devoted chiefly to Blodgett's botanical investigations, contains a few biographical data. [These appear to have been taken chiefly from Charles S. Sargent, The Silva of North America, 14 vols. New York, 1891-1902. See especially Vol. I, p. 33.] Some facts are in question. Ledin provides Massachusetts as his place of birth. The U. S. Census of 1840 gives it as Connecticut. Ledin assigns his death to July, 1853; the (Key West) Key of the Gulf of November 17, 1855 suggests 1855.
37. House of Representatives, Reports, No. 396, 28th Cong., 1st Sess., pp. 4-5.
38. This and other references to the outbreak of yellow fever in 1841 indicate that it reached epidemic proportions, particularly among the transient population. It appears to have been the most serious occurrence since that of 1829.
39. These were probably Dr. Dan Platt and James Davis. See note 32, *supra*.
40. House of Representatives, Reports, No. 396, 28th Cong. 1st Sess., pp. 3-4.
41. Ibid., pp. 2-3.
42. Territorial Papers, XXV, 403-5.
43. Records of the Public Health Service, Group 90, National Archives.
44. Ibid.
45. Jefferson B. Browne, Key West, the Old and the New, (St. Augustine), p. 175.

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The Link Between Melanchthon and Vesalius

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While few of the medical profession will be acquainted with Philipp Melanchthon (1497-1560), many will know of Andreas Vesalius (1514-1564). Both men served the Renaissance well, for during the 16th Century, Vesalius, author of the *Fabrica,* introduced the science of anatomy while Melanchthon, the scribe to the Reformation, developed innovations in education still felt in the Western continents.

Although both are renowned as reformers—one in medicine, the other in the church—in most ways they stand quite apart. Yet their paths crossed in an interesting and little known way. This essay deals with the particulars of their connection.

Melanchthon's Career to 1552

Melanchthon was born at Bretten in Baden in 1497. His father, Georg Schwarzert, was an armourer and his mother, Barbara Reuter, a niece of Johann Reuchlin, a German humanist and Greek scholar. Reuchlin supervised Melanchthon's education and by 1509 he took his B.A. degree at Heidelberg and in 1512 his M.A. at Tubingen. Because of his academic prowess, especially in the Greek classics, he was given the name Melanchthon (for black earth), the Grecianized form of Schwarzert. This was a common practice of the times for promising academicians.

As teacher and lecturer at Wittenberg, he became very popular so that early in his career he not only had advanced novel concepts in education, but also advocated many new educational programs. His advice, somewhat surprisingly, was heeded quickly in his proposal of abandoning many of the traditional methods of teaching and returning to original sources as the well-spring or stepping stone to education. With his background in classical Greek, experience in translating many works from the Greek and progressive ideas, it seemed only natural that he and Martin Luther would someday meet and become close personal friends. This took place between 1517 and 1519. Luther, in fact, adopted many of his ideas as Melanchthon helped him translate early religious writings from the Greek and it was only a matter of time (by 1519) until he became an integral force of the evangelical movement, thereby effecting an open break with his uncle (Reuchlin).

In 1521 he published the first systematized presentation of the reform theology, *Loci Communes Rerum Theologicarum,* and thereafter he was involved with the reform movement and education in general for the rest of his life.

As scribe of the Reformation, he has a place second only to Luther in the history of the Evangelical Lutheran Church. While the Augsburg confession, written in 1530, might be considered one of his loftiest moments, his many other contributions to the Protestant cause were hardly less important. One of these special contributions was a temperate personality, thereby balancing well with the quicker, more aggressive Luther. This need for such a balance Luther himself acknowledged when he wrote, "I am so constituted that I must battle with gangs and devils and keep to the field; therefore, my books are very fiery and warlike. . . . But master Philipp comes along gently and quietly; he plants and tills, sows and waters with joy according to the gifts which God has richly bestowed upon him."[1]

He was no less successful in educational reforms. During the period from 1520 to 1540, while working on evangelical doctrines, he wrote outlines of education for elementary grades. These were enacted into law and resulted in the first Protestant public school systems. His school plans, along with his texts, were copied throughout most of Germany; his training of teachers and untiring work in establishing universities resulted in his becoming known as the Preceptor of Germany.[2]

Numerous trips were made to Nuremberg; two are pertinent here. The first was in May, 1526, when he opened a new gymnasium. It is probable that Albrecht Durer executed his sketch to be later used for an engraving of Melanchthon during this stay.[3] The other important visit will be discussed later.

As primarily a theologian and educator, he expressed an intense interest in ethics, increasingly emphasizing good works as inevitable fruits of

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faith. At the same time he pointed out that man must at least accept the gift of God's salvation, making man therefore responsible for his destiny. For Melanchthon, man's good works in no way implied that eternal life was necessarily merited by the worthiness of one's own actions.

And yet—although an educator, a man of learning, a religious reformer, one of the intellectual leaders of Protestant Germans, and Luther's theologian—he expressed an intense interest in the various sciences. As he himself said years later in a letter dated November, 1562, prefixed to the Leipzig edition of his *De Anima:* "I have followed moreover the best authors, Galen, Vesalius and (others). . . ."[4] Nor did he limit his scientific interest from the profane and pseudo-sciences. Astrology was praised and defined, as were other arts of divination.[5] God and the devil could, in Melanchthon's eyes, act as a determining force in men's lives as could the stars. To him temperaments were not only governed by and allied to the heavens, but the stars' position could foresee fortuitous events as well. However, throughout all this, God could, he emphasized, interject His will and moderate the inclinations.[6]

In 1546 Martin Luther died. Thereafter Melanchthon's years were occupied with controversies within the Evangelical church, fruitless meetings with Romanist adversaries and consistent attempts at reconciling the two faiths to attain Christian unity.

Vesalius to 1552

While few men match Melanchthon's illustrious and broad career generally, Andreas Vesalius perhaps does so in the medical field. He was born in Brussels in 1514, as the son of a well-to-do court apothecary. His education at Louvain and later (1533-1536) at the University of Paris provoked an early interest in anatomy and while at these institutions he devoted much of his time to the study of dissection. It is hardly necessary to review in any detail the remainder of Vesalius' career. He obtained the M.D. degree in Padua in 1537 and published his first work the following year, the *Tabulae,* sumptuously illustrated by J. van Calcar. From 1539 to 1542 he worked on *De humani corporis fabrica* and published this in Basel in folio form in 1543.

Vesalius and the Link to Melanchthon

Vesalius' *De fabrica* founded modern anatomy, both in terms of breaking some of the shackles of Galen and in the art of medical illustrations. The work was both courted and criticized at the time of publication but, most importantly, it was widely read. It is unclear whether Melanchthon owned a first edition, but, as he himself stated, he certainly was familiar with the volume. It is unknown in which year between 1543 and 1552 Melanchthon studied its contents.

In 1552 Melanchthon received orders to await at Nuremberg further instructions concerning his being at the Council of Trent. He arrived there on January 22, staying at St. Aegidus convent, and departed on March 10, having received no instructions. However, during this period, he delivered more than 30 public lectures and wrote a variety of pieces, one of these being his reflection on the human body in orderly verse entitled *De Consideratione Human Corporis.*

It is this poem that links Melanchthon firmly with Vesalius' *De fabrica.* The 28-line poem is written in Melanchthon's personal hand.[7] Whether he once owned the volume or whether some friend had his copy autographed or appended the poem as a flyleaf when he had it bound is unfortunately unknown. The 28 elegiac lines are dated from Nuremberg on the day of the conversion of Paul (January 25), 1552.

After 1552 Vesalius accepted a position as physician to the imperial household of Charles V and later the royal household of Philip II. It is doubtful whether he and Melanchthon actually met during this interval. Melanchthon died in April, 1560 and was buried by Luther in Wittenberg. Four years later Vesalius made pilgrimage to the Holy Land (1564), and en route home from Jerusalem his ship put into the island of Zante and there Vesalius died.

From a historical viewpoint Melanchthon and Vesalius are linked in still another albeit controversial way. This is the circumstance of Vesalius' pilgrimage to Jerusalem. It has been accounted for in numerous ways, many contradictory. The most dramatic is given in a letter allegedly written by the publicist and diplomat, Hubert Languet (1518-1581), to Casper Peucer, physician and son-in-law of Melanchthon. It is dated January 1, 1565. "The story is that Vesalius is dead. Undoubtedly you have heard that he set out for Jerusalem, and the reason for that pilgrimage was a remarkable one as it has been written to me from Spain. A Spanish nobleman had been entrusted to his care, but when Vesalius believed him to have died, and because he was not satisfied as to the cause of his death, he sought permission from the relatives of the dead man to open the

Observations on the Human Body

Think not that atoms, rushing in senseless, hurried flight
Produced without a guiding will this world of novel form;
The mind which shaped them, wise beyond all other intellects,
Maintains and fashions everything in logical design.
Nor are the traces far to seek, so bright and clear they stand,
Revealing God the Founder well-defined on every side.
To know the ways of numbers and their order, and to hold
A judgment fixed immovable of righteousness and wrong,
Such wisdom sightless atoms do not of themselves provide:
It is instead the issue of a force which sees ahead.
The disposition of the earth, eternal with the skies,
The ordered movement of the stars recurring in their course,
Bear witness that a deity intelligent and good
Established these provisions and now holds them in control.
Accordingly it follows that the body's several parts
Came not together aimlessly as if devised by chance:
With purpose God assigned to each its own alloted task
And ordered that man's body be a temple to Himself
So Holy wisdom casts its rays within our human minds
And sways our thoughts with light divine emitted from His word.
Our hearts, in turn, enshrine the rule of justice, and feel pain
When God's avenging wrath is aimed to punish sinfulness.
The pain endures until we make atonement for the sin,
And, blest of God, again possess the joys of endless life.
Wherefore, as man reflects upon the marvels in himself,
With reverence let him venerate his Maker and his Lord,
And keep the temple undefiled, immune from any stain,
Lest wrath divine in vengeance come and hurl it crashing down.[8]

NUREMBERG, THE DAY OF
THE CONVERSION OF PAUL,
1552

body; having obtained such permission, when he opened the chest he found the heart still beating. The relatives, not content to accuse Vesalius of murder, also denounced him before the Inquisition as impious, thus seeking to gain an even greater revenge. When the cause of death was explained, it was not easy to excuse such error on the part of so skilled a physician, and the Inquisition fully determined upon his execution. It was only with the greatest difficulty that the king by his authority, or rather his supplication, was able to save him. The prayers of king and court were finally heeded on condition that Vesalius expiate his crime by a journey to Jerusalem and Mount Sinai."[9]

O'Malley[10] thoroughly reviews the possible reasons for Vesalius' trip and after convincingly discounting the above story concludes that perhaps several causes led to Vesalius's leaving Spain for the Holy Land, not the least of which was his planning a return to his old chair of anatomy at Padua after the death of Fallopio.

Although the reasons for his departure may never be clear, it is of interest that the most controversial account connects Vesalius once again to Melanchthon (via Languet's letter to Melanchthon's son-in-law).

Who bound the copy of Vesalius' *Fabrica* with Melanchthon's poem is unclear; nor are its owners known for 200 years after the death of Vesalius. The bound volume does bear two *ex libris* and one owner signature however. One who possessed it for awhile was Johann Wilhelm Schlegel (1774-1812), the son of a gynecologist. Schlegel published works on maternity institutions. Christian Erhard Kapp (1739-1824), a second owner, was a physician of Leipzig and Dresden and he is known for translating the works of Robert Whytt, William Cullen and Benjamin Bell into German. Ludolph Christian Treuivanus (1779-1864) of Bremen, Breslau and Bonn was the third known physician who owned the work. He is credited with introducing the term "biology" and his brother for describing the intercellular spaces microscopically.

The Armed Forces Medical Library acquired the volume in 1873, although the circumstances of the acquisition are at present an enigma. Photographs of the 28 verses of Melanchthon's poem were displayed by the Medical Department of the U. S. Army at the International Exhibition held in Philadelphia in 1876.

The next time this particular first edition of Vesalius' famous work is heard from occurs in 1945, the year Dr. Dorothy Schullian published her translation of Melanchthon's poem.[11] Then, in 1949, Dr. Elmer Belt of Los Angeles published as a Christmas greeting a folio with not only facsimiles of the title page of the *Fabrica* and flyleaf with Melanchthon's poem but also Dorothy Schullian's translation of the Latin poem and a copy

of Albrecht Durer's 1526 engraving of Melanchthon.[12]

Today Vesalius' *De Fabrica* and Melanchthon's poem are proudly preserved and presented at the National Library of Medicine in Bethesda, Maryland. As one reads the poem and peruses the work one is struck by inconsistencies. The authors were divergent in attitude and profession but similar in their ideology of reform—Melanchthon in the church, Vesalius in the teaching of anatomy. They come on the scene as the Renaissance first seems to be flexing its youthful muscles and indeed their works somewhat adumbrate the coming controversies which will soon result between what were considered by some as antiquated, religious beliefs and the enticing but cynical scientific approaches. The intonations are clear in Melanchthon's poem; the verses portray a personal, all-wise, all-powerful God, ready to strike man down lest he not believe—and fear. The *Fabrica,* on the other hand, stands on its being explicit and factual and its adoption of the rapidly developing scientific attitude, with reason alone as its master.

Notes

1. Walch, J. G., Ed.: Dr. Martin Luther's Sammtliche Schriften, St. Louis, Concordia Pub., 1898, vol. 14, p. 176.
2. Richards, J. W.: Phillip Melanchthon, the Protestant Preceptor of Germany, 1497-1560, New York, G. P. Putnam's Sons, 1898, and Manschreck, O. L.; Melanchthon, The Quiet Reformer, Nashville, Abingdon Press, 1958.
3. Schullian, D.: Old Volumes Shake Their Vellum Heads. Bull. Med. Lib. Assoc. 33:413-448, 1945.
4. Ibid., p. 445.
5. Thorndike, L.: History of Magic and Experimental Science, New York, Columbia University Press, 1941, vol. 10, p. 378.
6. Luther was little different in this regard. He believed, for example, that monstrous births foretold future events, a belief held over from early Babylonian times of around 700 B.C.
7. Schullian, D.: op. cit. p. 438.
8. Translated by Schullian, D., ibid., pp. 440.
9. O'Malley, C. D.: Andreas Vesalius of Brussels: 1514-1564. University of California Press, Berkeley, 1964, p. 304.
10. Ibid., pp. 304-306.
11. Dr. Schullian is also author of "A Catalogue of Incunabula and Manuscripts in the Army Medical Library," Henry Schumen, Inc., New York, 1950. She is currently Curator, History of Science Collections, Cornell University Libraries.
12. Dr. Belt, born in 1893, received his M.D. degree from the University of California and his LL.D. from Pacific College of Law. He is now Professor of Urology at the University of California, Los Angeles.

Dr. Barrow, University of Florida College of Medicine, Gainesville 32601.



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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

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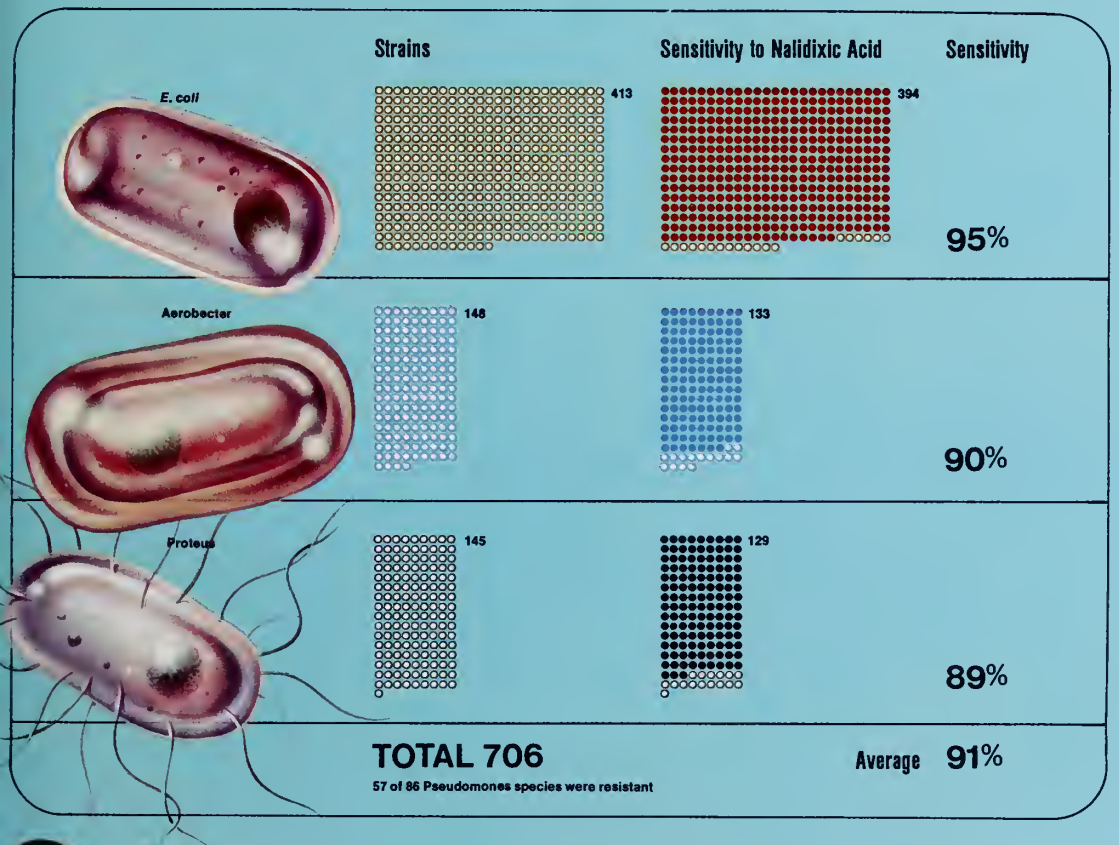
Kinetic Relationship of Acute and Chronic Bacterial Pyelonephritis to Chronic Renal Disease[2]



consistent activity against 706 gram-negative strains

In vitro testing of *E. coli*, Aerobacter and Proteus species showed better than 90% sensitivity to nalidixic acid.[3] (See Table)

Better Than 90% Sensitivity Among 3 Common Urinary Invaders



References: 1. Reimann-Hunziker, R. and Reimann-Hunziker, G. J.: *Praxis* 53:15, Jan. 9, 1964. 2. Sanford, J. P.: *Med. Times* 96:715, July 1968. 3. Reese, L.: *Canad. M. A. J.* 92:394-397, Feb. 20, 1965.

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Summary of prescribing information

Indications: Urinary tract infections in which species of sensitive gram-negative bacteria are predominant, particularly *Proteus, Escherichia coli, Aerobacter, Klebsiella,* and certain strains of *Pseudomonas.* Gram-positive bacteria are less sensitive to Cybis but favorable clinical results have been observed.

Warning: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

Precautions: Although prolonged treatment with Cybis has been generally well tolerated, as with all new drugs it is advisable to carry out blood, renal, and liver function tests periodically if treatment is continued for more than one or two weeks. The dosage recommended for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. **It should be used with caution in patients with liver disease, epilepsy, or severe cerebral arteriosclerosis, and in patients in whom kidney function is severely impaired.** Patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving Cybis and, if a photosensitivity reaction occurs, therapy should be discontinued.

During treatment microorganisms may develop resistance to this drug. Resistant bacteria, not previously present or identified, may emerge. Cultures should be taken and bacterial sensitivity tests made periodically, particularly if the clinical response is unsatisfactory or if a relapse occurs. Should resistance develop, other specific chemotherapy should be instituted; no cross resistance has been observed. If new strains of bacteria that are not sensitive emerge, other effective antibacterial agents may be added. When Benedict's or Fehling's solutions or Clinitest® Reagent Tablets are used to test the urine of patients taking Cybis, a false-positive reaction for glucose may be obtained due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (using, for example, Clinistix® Reagent Strips or Tes-Tape®) does not give a false-positive reaction to Cybis glucuronide.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances: less frequently, sleepiness, drowsiness, weakness, headache, dizziness and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed surfaces, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache have been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the latter generally in patients with possible predisposir factors, and both usually associated with excessive dosage) have been recorded in rare instances.

Dosage and administration: *Adults*—Four Gm. d by mouth (2 tablets of 500 mg. four times daily) for c to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. d (1 tablet of 500 mg. four times daily). *Children*— According to age and weight: approximately *25 mg. per pound* of body weight per day, administered in divided doses.

Note: The dosage recommended above for adults a children should not arbitrarily be doubled unless un the careful supervision of a physician. Until further experience is gained, infants under 1 month should be treated with the drug.

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Tree of Hippocrates

June graduates of the University of Florida College of Medicine honored the teacher they believe best exemplified excellence in teaching during their medical school years. They planted a rooting of the tree under which Hippocrates presumably taught twenty-five centuries ago. Under the tree, they placed a permanent bronze plaque which records the name of the recipient of the first Hippocratic Award for Teaching Excellence. This, they hope, starts a long and distinguished tradition at Florida.

Dr. Hugh M. Hill, professor of obstetrics and gynecology, is the first recipient of the Hippocratic Award for Teaching Excellence. He was chosen by the students who graduated in June 1969. From Dr. Hill's concluding remarks comes this quotation:

"Even though physicians teach us and our education is hopefully continuous, only one thing really trains the human mind, and that is the voluntary use of the mind by the individual himself. The good teacher may aid him, may guide and perchance even inspire him, but that which he retains is that which he receives from his own effort. And thus what he himself learns is far more important than that which he is taught.

"In conclusion, let me beseech you to be a continuous teacher and learner, for it will add greatly to the pleasure that you can derive from the long and happy life I wish for you so sincerely."

F. H. S.



The Hippocrates Award plaque at the University of Florida College of Medicine with its first award recipient, Dr. Hugh M. Hill (left) and the chairman of the graduating class, Dr. Walter Marshall, who presented the award in the name of his class.—Ed.

Your FMA Woman's Auxiliary

Marion S. Gilliland
(Mrs. C. H.)

Greetings from your Auxiliary's officers, chairmen, committees and individual members—your wives! Some of you may not be aware of our existence, as an auxiliary that is, and a hard working one at that. Well, we do, and we work actively in our communities to support your various programs and medicine in general.

Take AMA-ERF (American Medical Association Education and Research Foundation) for example. And that's a good one to take this time because the Art Show furnished the cover illustration for the July Journal, was a popular part of the Annual Meeting, and the registration fees totalling $400 go to AMA-ERF.

Perhaps you would like to know how your Auxiliary ranks nationally. Totals for the year just ended are not yet available so these comparisons are based on 1968 figures. There are eight state medical associations larger than the Florida Medical Association and six state auxiliaries have larger memberships, BUT only 59% of your wives are members of the Auxiliary, causing Florida to rank 30th in membership on a percentage basis. That's not very good, especially when there are states like New Hampshire where only one doctor does not have a wife in the auxiliary. How much will you bet that he doesn't have a wife at all?

As a national auxiliary we contributed to AMA-ERF for its three phases of funds for medical schools, loan guarantee fund and the Institute for Biomedical Research a total of $389,824.64, and over 3¼ million dollars in the last 17 years. A fairly impressive amount, wouldn't you say? With a national membership of 90,526 that makes the per member contribution $4.30. Representing 3.3% of the national membership, your Florida Auxiliary contributed $14,252.00 in 1968, or 3.6% of the national total, making our contribution $4.75 for each of our 2,995 members. Six states contributed larger total amounts, but 20 states made larger per member contributions. Tennessee ranked first with $20.61 per member, Wyoming second with $18.19, Nevada third with $17.48, Idaho fourth with $15.75 and Alabama fifth with $10.13.

Do you know what makes a lot of difference? It is the contributions doctors make to their alma maters WHICH ARE MADE THROUGH THE AUXILIARY AND AMA-ERF. It doesn't cost a penny more to do it that way and you still get full credit and acknowledgement from your alma mater and, of course, it is still fully deductible. In case you hadn't thought of it, this also has public relations value for organized medicine. So this year won't you give your check for your medical school to your wife to contribute through AMA-ERF? It can be designated any way you wish and will be acknowledged by both AMA-ERF and your medical school. And I promise that you would really appreciate the sincerity of this appeal with all the obvious and implied statistical computations if you knew how much I love math. If you know my husband, Herb, just ask him!

As you know, the Auxiliary does not raise funds externally. All our contributions come from within the medical community. Perhaps you would like to know what means we have used to raise this money. Nearly all counties sold to their members the playing cards, note paper and memo pads available from AMA-ERF; some have sold the attractive jewelry also available and most counties have sold Christmas cards. Some counties have held luncheons, fashion shows, dances, bridge parties, and white elephant sales. A few have sold golf balls also available from AMA-ERF. One county sold Medical Idento Tags; one county's

Mrs. Gilliland is president, Woman's Auxiliary to the Florida Medical Association.

members made and sold aprons and children's wall hangings; one county sold pecans. Some of the money was raised through memorial and appreciation gifts.

This is another area which has much greater possibilities. What better way to show appreciation to a colleague for tending a member of your family than to make a contribution in his name to his alma mater through your Auxiliary and AMA-ERF? The one so honored receives notification from AMA-ERF that a contribution has been made by you. And, what's more, it's totally deductible! Similar contributions are also a fitting memorial to deceased medical colleagues or members of their families as well. And, again, they are deductible.

Florida's contribution this year will be $14,263.98, an increase of $11.98 over last year, but our Auxiliary has grown. We now have 3,149 members, which brings the per member contribution down to $4.52, 23¢ less than last year. Lee-Hendry Auxiliary, which gave more than $16 per person, and Broward County with $13 per member, must be proud of their considerable part in making our per member average what it is.

So, doctors, help us to help Florida and organized medicine look good. Make your contributions to these worthwhile causes through your Auxiliary. It won't cost a cent more and your wives will love you for it. And those of you whose wives are not yet members of the Auxiliary, urge them to become members. Alone, we each can do something in the support of medicine, but together we can do so much more.

▶ Mrs. Gilliland, 324 N.W. 24th Street, Gainesville 32601.



Dr. Lee T. Rector of Tampa poses with his award-winning traditional painting and other entries during the 1969 FMA benefit art show sponsored by the Woman's Auxiliary.

Woman's Auxiliary Third Annual Art Show Displays Varied Talents

Carolyn Kenaston
(Mrs. Thomas C. Jr.)

The background of the Woman's Auxiliary Annual Art Show can be succinctly described by a nursery rhyme slightly changed.

One—for the money
Two—for the show
Three—to get ready
Four—to grow.

County auxiliaries for years have raised money to contribute to three projects of the American Medical Association - Education and Research Foundation (AMA-ERF): Funds for Medical Schools, Institute for Biomedical Research, and Student Loan Program. By supporting these projects which provide better medicine, more physicians and better medical schools, auxiliaries believed they were indirectly helping their doctor-husbands. To educate physicians in these auxiliary endeavors, an idea was conceived in 1967 to spotlight the projects and to raise money for AMA-ERF through the medium of a Benefit Art Show.

The First Annual Art Show proved to be not only an eye-catcher, a cultural refuge from convention stress, but also a potential money-maker as well. Contributions have increased each year, with $410 going to AMA-ERF this year. The varied talents of doctors and their wives were enthusiastically received by all.

In response to many requests, and with the desire to further encourage the artistic talent of the medical profession, plans were made for the Second Benefit Art Show. Judges were amazed at the talent displayed, and agreed that the medical family truly enjoyed and were skilled in this wonderful avenue of relaxation.

To get ready, each year the art show is modestly planned and executed with the constant encouragement and support of the FMA, without whose help the show would surely fail. Plans made in the fall combined with publicity mailed in the spring culminate at the FMA convention with the collection of the exciting individual talents that make your show a success each year.

Those who had the pleasure of viewing our show this year were again delighted at the ability and talent of their friends in the medical family. It is apparent that the art exhibit has grown beyond its simple beginnings.

By expanding the categorical divisions, the art show attempts to keep abreast of the new trends in art. New forms of art and new media are used each year, giving evidence that art is more than a casual pastime for physicians. It has become a dedicated part of their leisure life.

Each year new artists add their names to our roster. More physicians registered entries this year than in previous years.

Each year our qualified judges, chosen from the convention community, donate their time and talent, carefully discussing and judging each entry. They are continually amazed at the variety and quality of the talent displayed.

We look ahead to 1970 with great anticipation. That will be our year to grow. We plan to open the Fourth Benefit Art Show to include children of the medical family. Won't this be a delightful addition?

PLAN NOW TO MAKE THE BENEFIT ART SHOW YOUR THING FOR 1970.

Award of Merit Winners
Benefit Art Show — 1969

Best in Show: Mrs. A. Denton Jones, Jacksonville
Mrs. John Purger, Fort Lauderdale
Dr. Wade S. Rizk, Jacksonville
Dr. Gilbert B. Snyder, Miami
Dr. Philip Weinstein, Miami
Dr. Gertrude Warner, Ocala
Mrs. Arthur Brill, Hollywood
Dr. David Davis, St. Petersburg
Mrs. D. S. de la Penha, Hollywood
Mrs. Stanley G. Hanna, Miami
Dr. O. A. Holzer, Melbourne
Mrs. Everett Harrison, Dunedin
Mrs. A. Denton Jones, Jacksonville
Mrs. Adrian Jensen, Rockledge
Dr. Lyon Loomis, Miami
Mrs. Alex Kushner, Miami
Dr. Lee T. Rector, Tampa

Mrs. Kenaston, 1305 Rockledge Drive, Rockledge 32955.

Mrs. Kenaston was chairman of the 1969 art show.

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brand of tybamate

(When you consult
the Prescribing Information
you may agree
it makes good sense)



CRIBING INFORMATION

cations: Tybatran (tybamate) has afforded sympto- improvement in a variety of psychoneurotic disor- especially in the treatment of the anxiety and tension nents of psychoneuroses. Anxiety states manifested ically have responded to Tybatran (tybamate).

atran (tybamate) has been useful in the control of on in the aged and in the alleviation of some of the e emotional accompaniments of senility.

atran (tybamate) has been used with benefit in the ent of depressive symptoms associated with anxiety ther symptoms of psychoneuroses. However, it is not ted for primary treatment of depressive states. It is n antipsychotic agent, although it has been used as ctive therapy in some psychotic patients.

sage: One 350 mg. capsule, 3 times daily and two at me is suggested as the adult starting dose. Adjust to ndividual requirements. Daily doses above 3000 mg. ot recommended.

ntraindications: Known hypersensitivity to tybamate. no studies have been done with this drug in human ancy, it should not be used in pregnancy unless the tial benefit outweighs the risk.

arnings: Administer cautiously to patients receiving othiazines or other CNS depressants or having his- of convulsive seizures (See Adverse Reactions). Con- possibility of additive actions with alcohol or other hotropic agents, particularly phenothiazines or MAO itors.

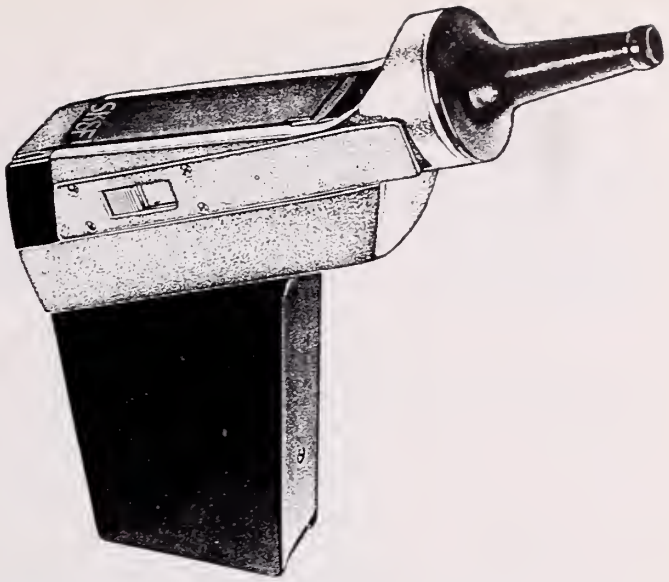
ecautions: Avoid abrupt withdrawal after prolonged although withdrawal symptoms have not been reported ate. Exercise caution in addiction-prone individuals. If toms of hypersensitivity occur, discontinue at once initiate appropriate symptomatic treatment. Avoid ities requiring optimal mental alertness if drowsiness rtigo are present. As with any new drug, use cautiously tients with history of drug allergies, blood dyscrasias, hepatic or renal disease; periodic measurements of tic, hematopoietic and renal function should accom- prolonged and/or high doses.

dverse Reactions: Most frequent reactions, rarely re- ng discontinuation of tybamate, include drowsiness, ness, nausea, insomnia, and euphoria. There have been v reports of skin rash, urticaria, and pruritus. Rare side ts include hyperactivity, fidgetiness, flushing, and tach- dia, suggesting excessive stimulation; also ataxia, un- diness, confusion, feeling of unreality, "panic reaction," ue, headache, paresthesias, vertigo, gastrointestinal rbances, glossitis, and dry mouth. Grand mal or petit seizures have been reported in a few hospitalized psy- ic patients receiving tybamate (up to 6000 mg. daily) ther with phenothiazines and other psychotropic ts, but not with tybamate alone. Consider the possibil- f rare, serious adverse reactions such as may occur the related drug, meprobamate. If excessive amounts ngested, gastric lavage and symptomatic therapy, in- ng central stimulants as necessary, are recommended. re prescribing, consult package circular.

pply: Tybatran (tybamate) is available in green, sealed ules of three strengths: 350 mg., 250 mg., and 125 mg. strength is supplied in bottles of 100 and 500.

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the "Action" gap

Of the more than 100 different types of cancer, colon and rectal cancers are unique for two compelling reasons:

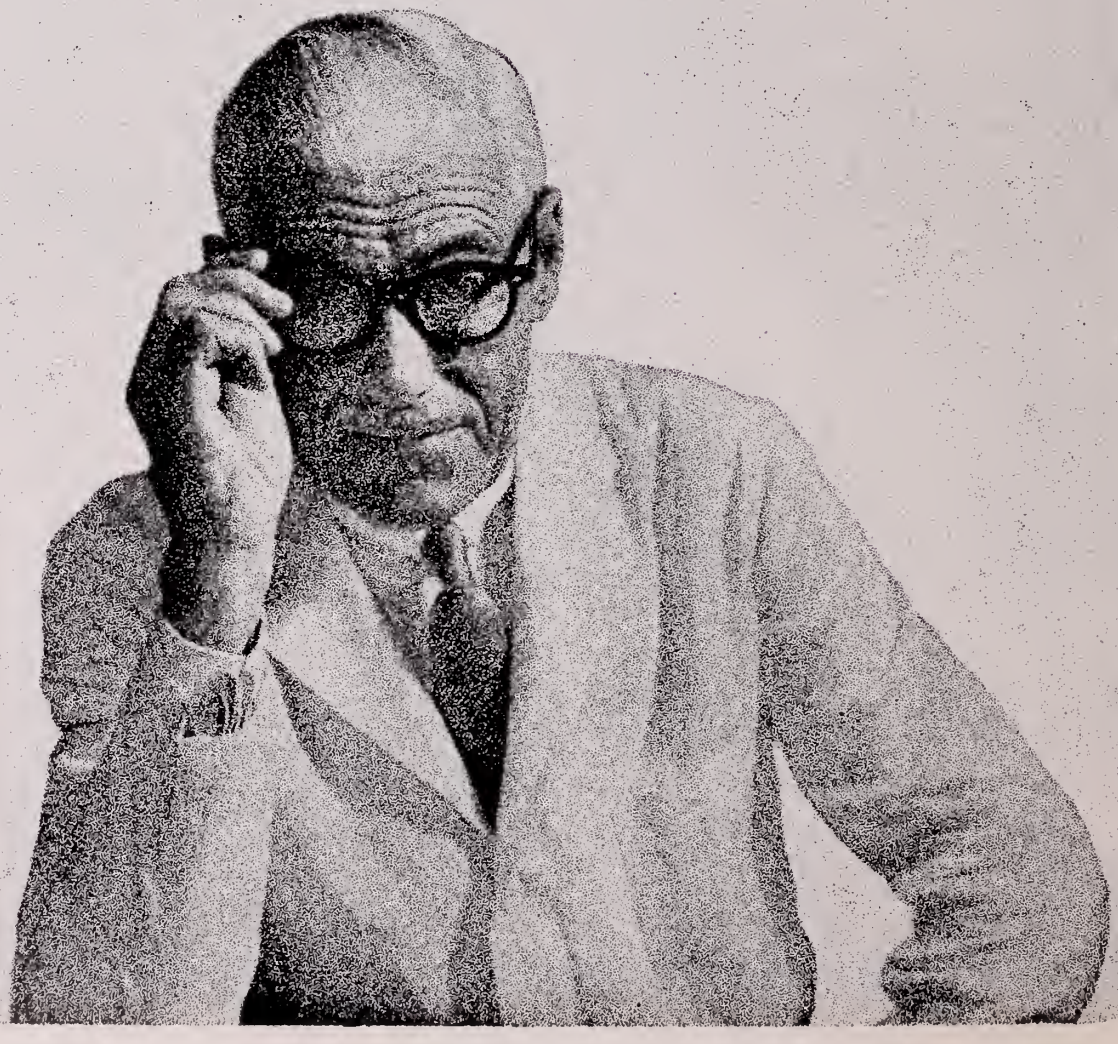
High incidence:	Annual new cases number about 73,000. Deaths now total 46,000 a year.
High curability potential:	Early diagnosis and prompt treatment could save almost 75%. Survival rate is now only 44%.

How to close the critical gap between possible and actual survivals?

The "procto" can today help save more lives from cancer than any other step in the checkup. Which is why, in our constant emphasis on the importance of annual checkups, we urge the inclusion of a "procto" ...and make available films and other pertinent materials for the layman and the physician. We *are* closing the "communications" gap.

Joint action by people and their doctors can help close the "action" gap to reach a cure rate of almost 75% for colon and rectal cancer.

American Cancer Society



When it's more than a bad cold



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Each tablet contains: ACHROMYCIN® Tetracycline HCl 125 mg.; Phenacetin 120 mg.; Caffeine 30 mg.; Salicylamide 150 mg.; Chlorothen citrate 25 mg.

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Contraindications: Hypersensitivity to any component.

Warning: In renal impairment, since liver toxicity is possible, lower doses are indicated; during prolonged therapy consider serum level determinations. Photodynamic reaction to sunlight may occur in hypersensitive persons. Photosensitive individuals should avoid exposure; discontinue treatment if skin discomfort occurs.

Precautions: Drowsiness, anorexia, slight gastric distress can occur. In excessive drowsiness, consider longer dosage intervals. Persons on full dosage should not operate vehicles. Nonsusceptible organisms may overgrow; treat superinfection appropriately. Treat beta-hemolytic streptococcal infections at least 10 days to help prevent rheumatic fever or acute glomerulonephritis. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

Adverse Reactions: *Gastrointestinal*—anorexia, nausea, vomiting, diarrhea, stomatitis, glossitis, enterocolitis, pruritus ani. *Skin*—maculopapular and erythematous rashes; exfoliative dermatitis; photosensitivity; onycholysis, nail discoloration. *Kidney*—dose-related rise in BUN. *Hypersensitivity* reactions—urticaria, angioneurotic edema, anaphylaxis. *Intracranial*—bulging fontanels in young infants. *Teeth*—yellow-brown staining; enamel hypoplasia. *Blood*—anemia, thrombocytopenic purpura, neutropenia, eosinophilia. *Liver*—cholestasis at high dosage.

Upon adverse reaction, stop medication and treat appropriately.

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348-8


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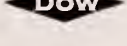
Our travel-pak for summer cold and allergy sufferers.

Novahistine LP can speed your patients on their way, by providing prompt and continuous relief from the symptoms of summer colds and allergies. These continuous-release tablets contain a vasoconstrictor-antihistamine formulation that goes to work rapidly and lasts for hours. Even when nasal congestion is caused by repeated allergic episodes, the convenient twice-a-day dosage of Novahistine LP makes it easy for most patients to enjoy relief all day and all night. When symptoms are severe, a third dose of one or two tablets may be safely given. Use with caution in patients with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result.

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Novahistine®
LP decongestant

(Each tablet contains 25 mg. of phenylephrine hydrochloride and 4 mg. of chlorpheniramine maleate.)

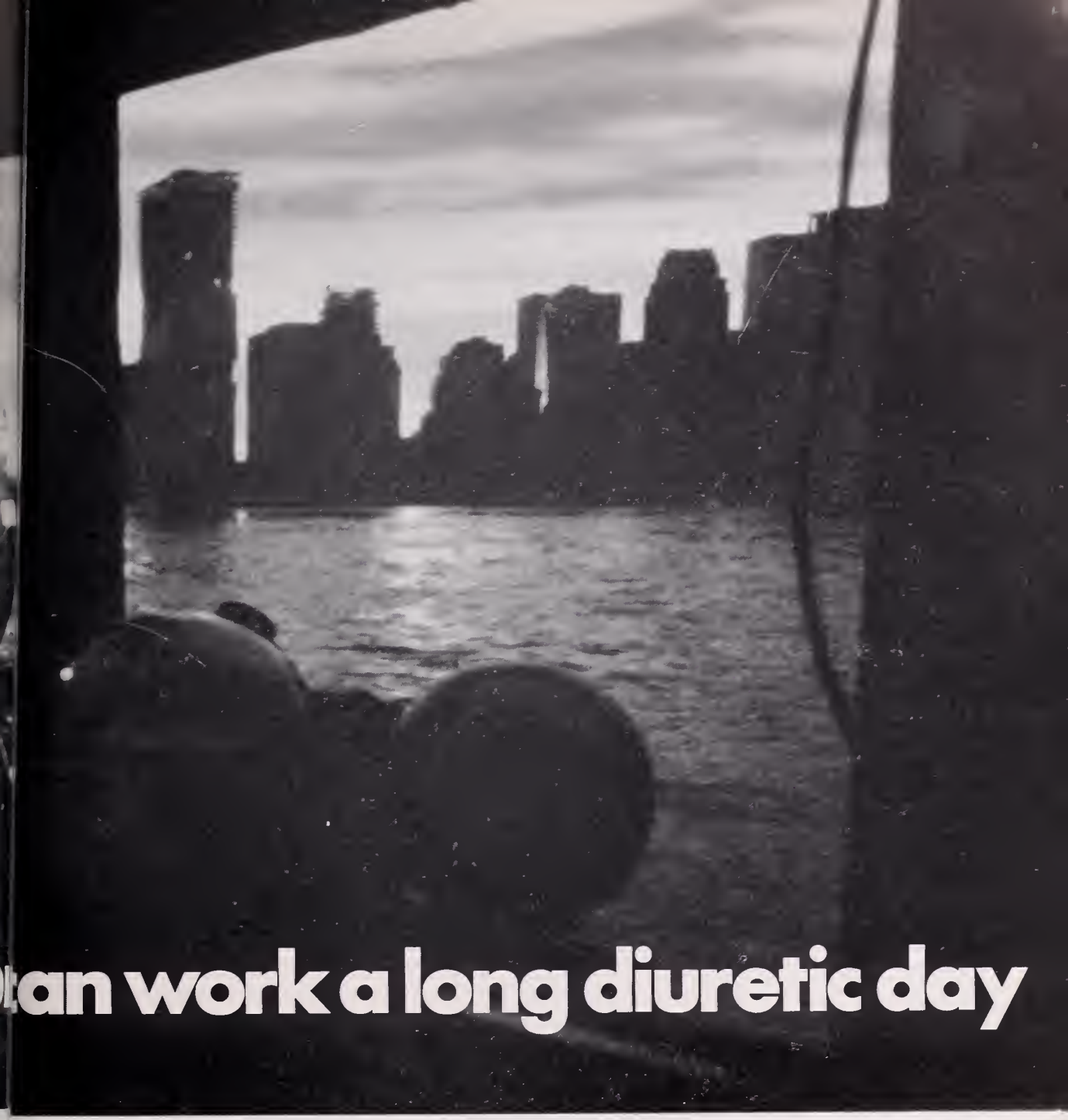




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ygroton, chlorthalidone, can cause side effects. And it's contra-
idicated in hypersensitivity to the drug and severe renal and
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heck the prescribing information. It's summarized on the next page.

Geigy



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chlorthalidone

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic diseases.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has been required frequently and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant women and nursing mothers since the drug may cross the placental barrier and appear in cord blood and since thiazides may appear in breast milk. The drug may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult. When used in women of childbearing age, balance benefits of drug against possible hazards to fetus.

Precautions: Antihypertensive therapy with this drug should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents, other potent antihypertensive drugs or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, the drug should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, glycosuria, hyperuricemia, headache, muscle cramps, orthostatic hypotension, which may be potentiated when chlorthalidone is combined with barbiturates, narcotics or alcohol, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and poncreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

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Florida Medical meetings

FMA Approved Postgraduate Meetings

SEPTEMBER

12-13 Neonatology for the Family Physician, University of Florida College of Medicine, Gainesville

19-20 Seminar in Otolaryngology, University of Florida College of Medicine, Gainesville

20 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

27 Eighth Annual Physician Seminar on Respiratory Diseases, Orange Memorial Hospital Auditorium, Orlando

OCTOBER

4 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

16-18 Neurology-Neurosurgery Seminar, University of Florida College of Medicine, Gainesville

18 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

23-26 Seventh Annual Cardiology Seminar, Tides Bath Club, Redington Beach

25 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

NOVEMBER

6- 7 Seminar on Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville

7- 8 ENT for the Family Practitioner, University of Miami School of Medicine, Miami

8 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

12-15 Today's Hospital Problems: An Interdisciplinary Approach Third Conference, Tides Hotel and Bath Club, St. Petersburg

DECEMBER

12-14 Neuromuscular Skeletal Disorders: Current Concepts in Surgery and Rehabilitation, Americana Hotel, Miami Beach

15-17 The Dysvascular Amputee: Surgical and Prosthetic Management, Americana Hotel, Miami Beach

National and Regional Meetings in Florida

1969

DECEMBER

6-11 American Academy of Dermatology, Americana Hotel, Miami Beach

1970

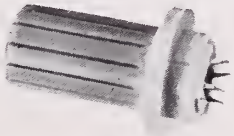
MARCH

14-18 American Society of Abdominal Surgeons Clinical Congress, Deauville Hotel, Miami Beach

19-24 American Dermatological Association, Boca Raton Hotel, Boca Raton



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Precautions: With a positive reaction, consider further diagnostic procedures. Use with caution in persons with active tuberculosis or known allergy to acacia. Vesiculation, ulceration, or necrosis may occur at the test site in highly sensitive persons.

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Florida Medical classified

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GENERAL PRACTITIONER needed: On beautiful Sanibel and Captiva Islands. Perfect for a semi-retired physician who loves nature. Write for details; Secretary, Sanibel Community Association, Sanibel, Florida 33957.

WANTED: Family physician to do family practice with established GP on the west coast. Excellent income opportunity. Write Edwin K. House, M.D., 629 West Broad St., Brooksville, Fla. 33512.

GENERAL PRACTITIONER WANTED: For private practice, pleasant surroundings in Jacksonville area. Seventy-five bed county hospital adjacent to modern office building with two colleagues. Write C-842, P.O. Box 2411, Jacksonville, Fla. 32203.

WANTED: General practitioner to associate with two GPs in Tampa. No obstetrics or surgery. Alternate nights and weekends. Percentage with basic guarantee. Write C-895, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERN OR RESIDENT: Our two-man G.P. office in the southwest area of Miami, well established, with adequate space, needs a third physician for permanent association who is interested in general practice and family medicine. Any physician interested in discussing this further, please contact us at this office as soon as possible: 9621 Bird Rd., Miami 33165.

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INTERNIST WANTED: For association with four internists. Southeast coast of Florida. Board qualified, Florida boards advisable. Salary $22,000, plus commission. Future partnership assured. Position open in fall or possibly sooner. Reply C-902, P.O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: For partnership in large general and surgical practice adaptable to departmentalization. FACS owner surgically oriented. 2,700 sq. ft. physical plant with unusual ancillary facilities. Write C-848, P.O. Box 2411, Jacksonville, Fla. 32203.

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WANTED: Surgeon, Florida. $35,000; board certified, direct residencies; teaching experience; fee paid. Send resume to American Medical Personnel, 159 East Chicago, Chicago, Ill. 60611.

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EMERGENCY ROOM PHYSICIANS WANTED: Must have Florida license. $22,000 minimum. Positions available immediately. Holy Cross Hospital, Inc., Fort Lauderdale, Fla. 33308.

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WANTED: Emergency room physician in hospital; to join group of private physicians, 42-hour week, income $20,000 plus. Contact Bruce S. Webster, M.D., 1416 South Orange Ave., Orlando, Fla. 32806. Phone 647-5728.

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POSITION WANTED: Would like to associate with busy ophthalmologist in Hollywood area; either direct association, sublease hours or assist. American board certified fellow of American College Surgeons. Have Florida license. Write C-907, P.O. Box 2411, Jacksonville, Fla. 32203.

(Continued)

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Contraindicated: Known hypersensitivity to the drug Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcitec states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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SEPTEMBER, 1969 • VOLUME 56 • NUMBER 9



Dear Doctor, You made me what I am today— a whole lot slimmer!

TEPANIL—the right start in support of weight-control program *you* recommen reduces the appetite. Doesn't kill it. We loss is significant—gradual—yet there relatively low incidence of CNS stim tion. Because TEPANIL works on appetite, not on the "nerves."

Contraindications: Concurrently with MAO inhibitors, in p hypersensitive to this drug; in emotionally unstoble p susceptible to drug abuse.

Warning: Althaugh generally safer than the amphet use with great caution in potients with severe hypertens severe cardiovascular disease. Do nat use during first trimes pregnancy unless potential benefits autweigh potential risks.

Adverse Reactions: Rarely severe enough to require discontinuation o apy, unpleasant symptams with diethylpropian hydrochlaride have been re to occur in relatively law incidence.

As is characteristic of sympathomimetic agents, it may occasionally cause CNS effects su insomnia, nervousness, dizziness, anxiety, and jitteriness. In cantrast, CNS depressian has reported. In a few epileptics an increase in convulsive episodes has been reported.

Sympathomimetic *cardiavascular effects* reported include anes such as tachycardia, prec poin, arrhythmia, palpitation, and increased blood pressure. One published report des T-wave changes in the ECG af a healthy yaung male after ingestian af diethylprapian chloride; this was an isolated experience, which has nat been reported by athers.

Allergic phenamena reported include such canditians as rash, urticaria, ecchymosis, and eryt *Gastrointestinal effects* such as diarrhea, canstipatian, nausea, vamiting, and abdaminal d fort have been reported.

Specific reports on the hematapoietic system include two each of bone morrow depre agranulocytasis, and leukopenia.

A variety af miscellaneaus adverse reactians have been reported by physicians. These ir complaints such as dry mauth, headache, dyspnea, menstrual upset, hair loss, muscle decreased libido, dysuria, and polyuria.

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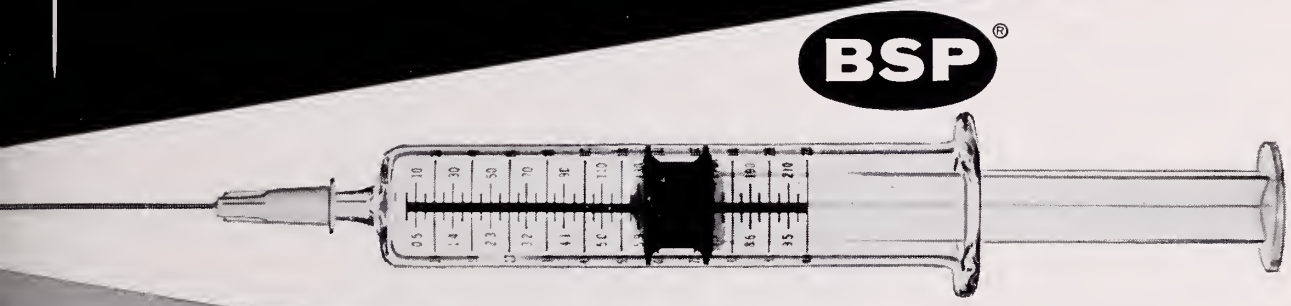
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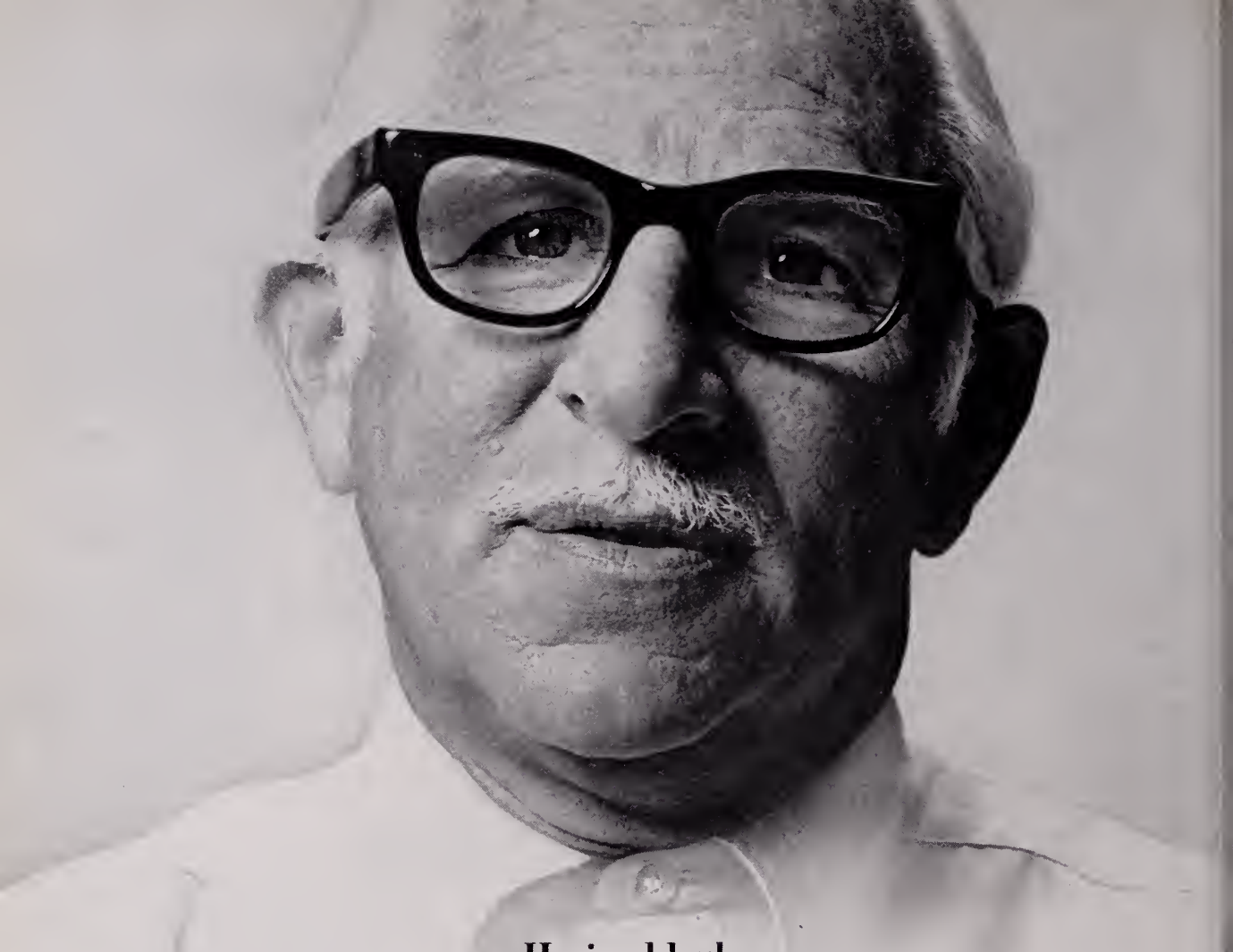
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Contraindication: History of hypersensitivity to demethylchlortetracycline or nystatin.

Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. C stant observation is essential. If new infections appear, appropr measures should be taken. In infants, increased intracranial pre with bulging fontanels has been observed. All signs and symptoms disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculo ular and erythematous rashes; a rare case of exfoliative dermatiti been reported. Photosensitivity; onycholysis and discoloration o nails (rare). Kidney—rise in BUN, apparently dose related. Tran increase in urinary output, sometimes accompanied by thirst (r Hypersensitivity reactions—urticaria, angioneurotic edema, anaphyl Teeth—dental staining (yellow-brown) in children of mothers given drug during the latter half of pregnancy, and in children given the during the neonatal period, infancy and early childhood. Enamel h plasia has been seen in a few children. If adverse reaction or idio crasy occurs, discontinue medication and institute appropriate the Demethylchlortetracycline may form a stable calcium complex in bone-forming tissue with no serious harmful effects reported thus in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Shoul given 1 hour before or 2 hours after meals, since absorption is impa by the concomitant administration of high calcium content drugs, f and some dairy products. Treatment of streptococcal infections sh continue for 10 days, even though symptoms have subsided.

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WHAT'S SO WEAK ABOUT THE WEAKER SEX?

OFTEN... HER LOWER G.I. TRACT



Psycho-abdominal Distress: Frequently Female

Women aged 15 to 45 appear to be more prone than men to bloating, cramping pain of stress-related intestinal disturbances such as irritable or spastic colon.[1,2]

Frequently Recurrent

In the experience of many physicians, women are more likely to reappear time after time with repeated complaints of lower G.I. distress.

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Often needed is therapy adequate to control both the somatic and the emotional components of psycho-abdominal complaints.

Definitive Dual Therapy

'Milpath' contains a proven synthetic anticholinergic useful for relieving hypermotility, spasm, and hypersecretion of the gastrointestinal tract.

In addition, 'Milpath' provides a time-tested tranquilizer for mild but effective anti-anxiety action.

With Flexible Dosage

- 'Milpath'-400 (meprobamate 400 mg. + tridihexethyl chloride 25 mg.) Usual adult dose: 1 tablet *t.i.d.* and 2 at bedtime.
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(meprobamate + tridihexethyl chloride)

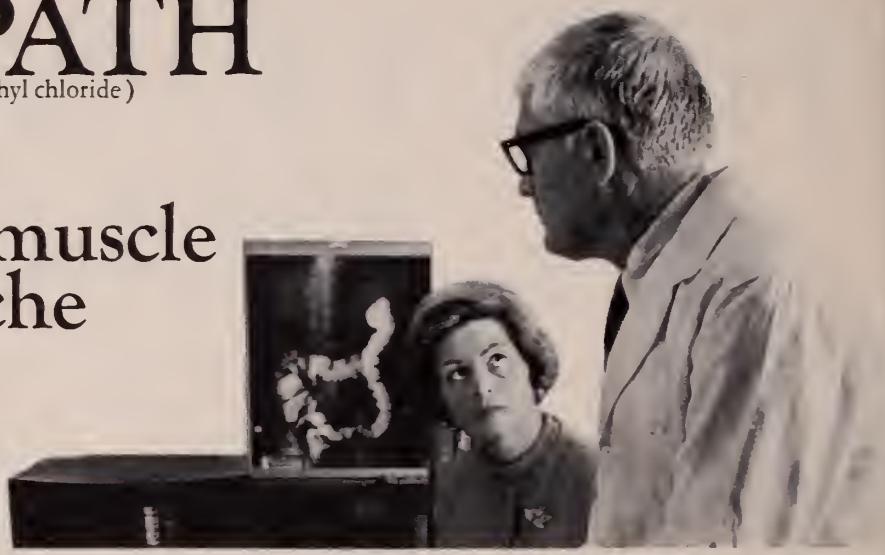
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Contraindications

Tridihexethyl chloride: Urinary bladder-neck obstructions, e.g., prostatic obstruction due to hypertrophy; pyloric obstructions because of reduced motility and tonus: organic cardiospasm (megaesophagus); glaucoma; possibly in stenosing gastric or duodenal ulcers with significant gastric retention.

Meprobamate: Previous allergic or idiosyncratic reactions to meprobamate.

Precautions

Tridihexethyl chloride: Use cautiously in elderly males (possible prostatic hypertrophy).

Meprobamate: Carefully supervise dose and amounts prescribed. Consider possible dependence or habituation (reported occasionally after excessive use), particularly in severe psychoneurotics, alcoholics, ex-addicts. Withdraw gradually (one or two weeks) after excessive dosage for weeks or months to avoid recurrence of pre-existing symptoms (e.g., anxiety, anorexia, insomnia) or withdrawal reactions (e.g., vomiting, ataxia, tremors, muscle twitching; rarely, epileptiform seizures, more likely in those with CNS damage or latent convulsive disorders). If drowsiness or visual disturbance occurs, reduce dose and advise against activity requiring alertness (driving, machinery operation). Effects of excess alcohol may be increased. Grand mal seizures possible in persons with both petit and grand mal. Prescribe cautiously in small amounts to patients with suicidal tendencies. Prescribe with caution to patients with known sensitivity to compounds of similar chemical structure, e.g., carisoprodol.

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Suicidal attempts may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse, and death. Excessive dosage has led rapidly to sleep, then reduction of vital signs to basal levels. Empty stomach, and if respiration becomes very shallow and slow, cautiously give CNS stimulants (e.g., caffeine, pentylenetetrazol, amphetamine); also pressor amines if indicated.

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References

1. Harrison, T. R., et al.: Principles of Internal Medicine, Fifth Edition, New York, The Blakiston Division, McGraw-Hill Book Company, 1966, p. 1019. 2. Bockus, H. L.: Gastroenterology, Second Edition, Philadelphia & London, W. B. Saunders Company, 1964, Vol. II, p. 729 et seq.

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Titles should be short, specific and clear. Omit phrases such as "The Use of," or "Observations on." If paper was presented at a meeting, indicate name of organization, city, month, day and year.

Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

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References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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In Gastritis

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Indications: Peptic ulcer: duodenal, marginal, gastric, esophageal; gastroesophageal reflux; esophagitis (without stricture); irritable bowel syndrome; hyperacidity and dyspepsia; congenital shortening of esophagus with esophagitis; heartburn; spasm of the cardiac end of esophagus; gastritis; symptomatic hiatus hernia; alcoholic gastritis; functional pylorospasm.

Contraindications: Because of the anticholinergic action of orphenadrine, Estomul should not be used in patients with glaucoma, pyloric or duodenal obstruction, stenosing peptic ulcers, prostatic hypertrophy or obstruction at the bladder neck, achalasia (megaesophagus), and myasthenia gravis.

Precautions: Doses in excess of six tablets or six tablespoons of liquid daily may produce minor side actions such as dryness of the mouth or blurred vision.

Warning: Use of any drug in pregnancy, lactation or in women of child-bearing age requires that the potential benefit of the drug be weighed against its possible hazards to the mother and child. As with all anticholinergic drugs, an inhibiting effect on lactation may occur.

Side Effects: Possible side actions include: tachycardia, palpitation, urinary hesitancy or retention, dry mouth, blurred vision, dilatation of the pupil, increased ocular tension, weakness, nausea, vomiting, headache, dizziness, constipation, drowsiness, and rarely, urticaria and other dermatoses. Infrequently, an elderly patient may experience some degree of mental confusion.

Dosage: For adults: One or two tablespoons of liquid or one or two swallow tablets three times daily; depending on severity.

Availability: On Rx only. 12 oz. bottles of liquid and bottles of 100 swallow tablets.

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Contraindications: Severe central nervous system depression, comatose states from any cause, hypertensive or hypotensive heart disease of extreme degree.

Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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"Judge Not....."

Ever since the American Medical Association's annual convention in New York City in July 1969, I have been quietly angry. I was one of the "captive" audience delivered to that rude, ugly group of poorly identified people who, in disregard of the rules of common decency, disturbed our meeting by seizing the microphones and calling us murderers.

Medicine is under sustained attack these days. Such attacks seem to go in cycles, almost like sun spots. At any rate, the onslaught is fierce and for the most part quite unfair. Because our incomes are high and we are in short supply we get rabid criticism. I guess we cannot expect otherwise but I'm getting tired of accepting the criticism of people I do not think have the best interest of this country at heart and certainly seem intent on destroying me! They cannot be pleased and I am not sure I am not going to try to please them. Reasonable criticism by reasonable people who know the problem—yes; but otherwise my own reaction is to say: "Stop. You have gone far enough."

The Medicare program has precipitated some of the criticism. Isn't it ironic? The medical profession said originally: "Watch out, Mr. and Mrs. Public and Mr. and Mrs. Congressman. Your method of financing by guaranteeing service (not dollars) is going to cost you your shirt." But no one listened and Congress in the name of the people responded by saying: "This is what we want." The medical profession after some ineffective protests finally said: "Well, all right. If this is what you want, we will do all we can to make the program work." And now I'll be damned if we aren't being attacked because the program *is* successful and is costing tremendous sums of money because it is successful. We knew and know now that pumping large amounts of money through many government programs into an already overheated medical economy would be expensive—and we said so over and over again. Congress knew it would be expensive but insisted. Now that it is a fact, the government suddenly has discovered that the cost of medical care (total cost: hospitals, physicians, drugs, etc.) is too high—but also is insisting that all services must be expanded to cover all people equally. Our government made a promise to the people in 1966 of financing Medicare and now they want to "chicken out" on paying the tremendous bill.

Of course we know the problems are complex and we are sympathetic and want to help in solving the problems. The medical profession has been "painted into a corner," not by ourselves, and we want to work our way out, *but* unfair criticism by non-producers will not help solve the problems. All I say is that I hope our citizens and our government leaders will take a more friendly attitude toward us because if the present rate and intensity of attack continues, we will simply harden our attitudes and fight back and will quit worrying about our public image or our public relations. We can take a page from organized labor's book. They have fought many an unpopular battle and not worried too much about the public image. They realized that they were the producers, that they had the "muscle" and had the right to talk up.

We have never taken extreme attitudes but I think someone, somewhere, must say for us, the medical profession: "Look, we have had enough now. Don't tread further on us. Judge not that ye be not judged."

Henry J. Babenough Jr.

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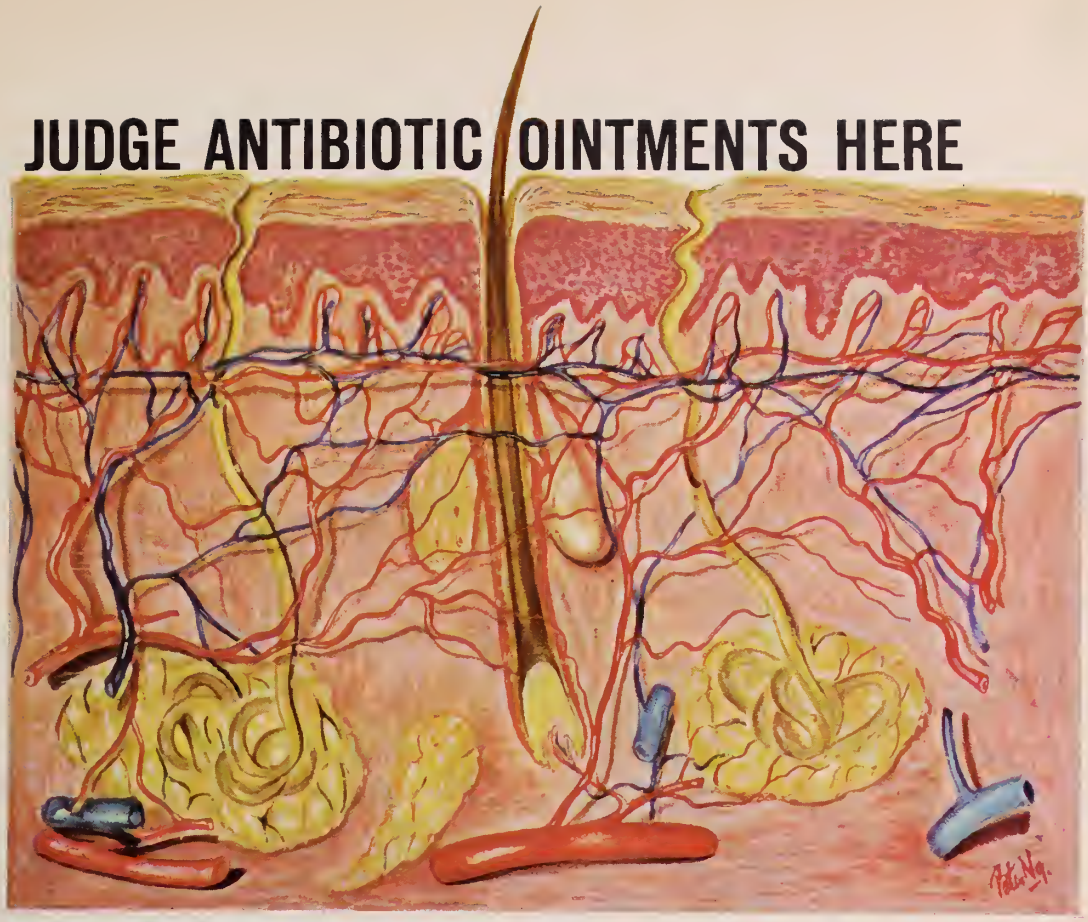
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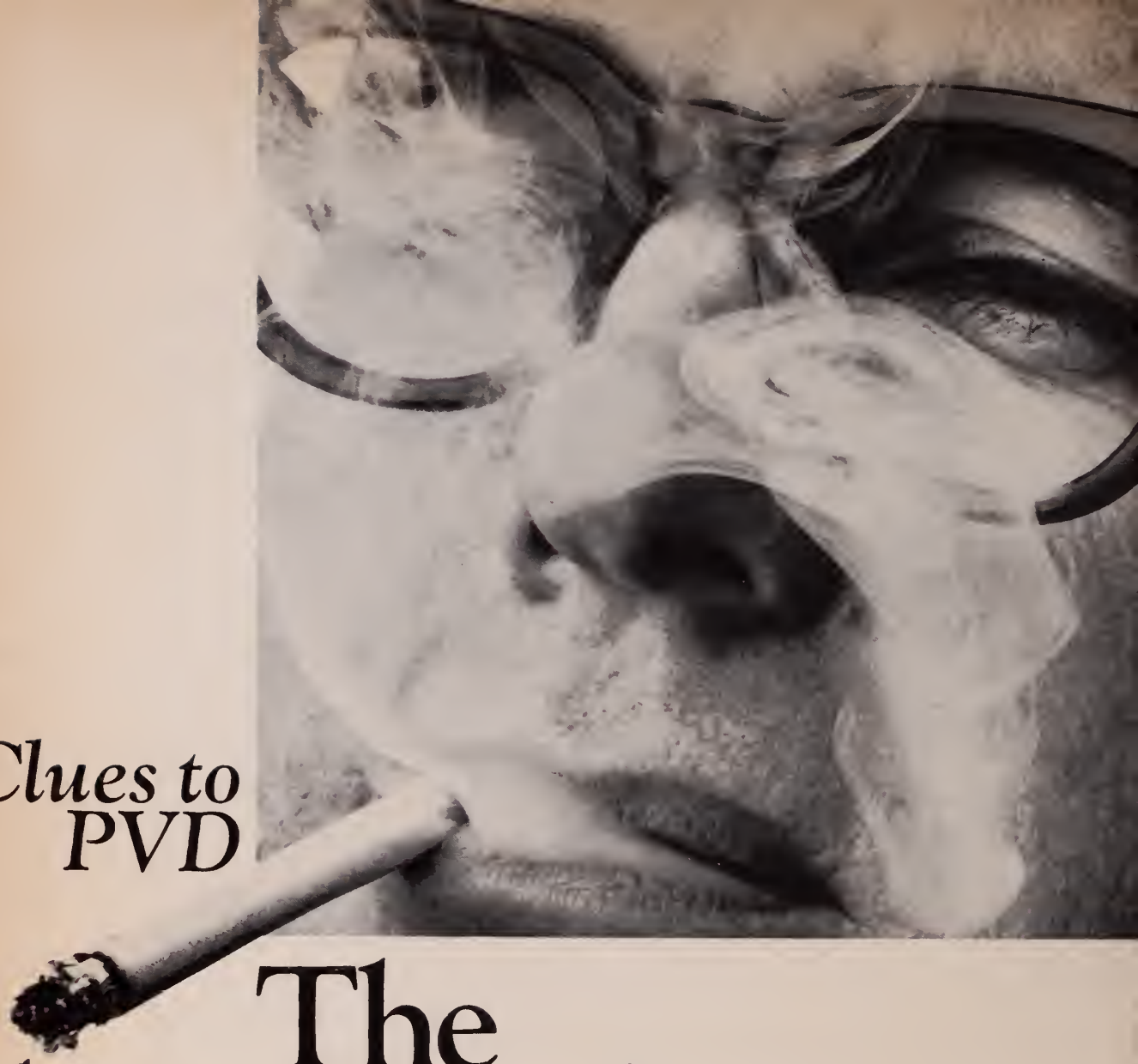
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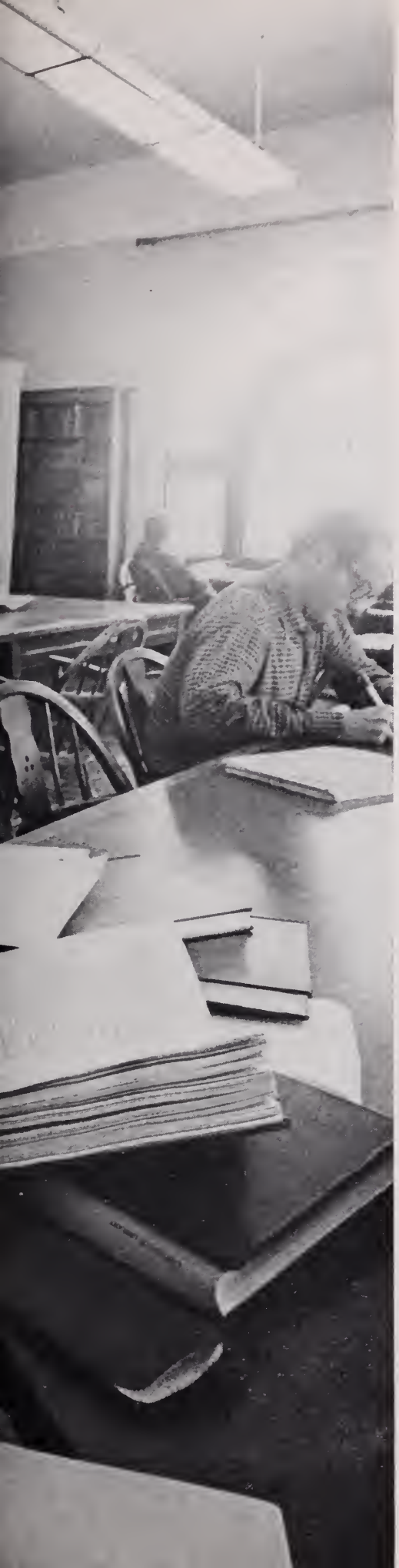
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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Dosage: One 350 mg. capsule, 3 times daily and two at dtime is suggested as the adult starting dose. Adjust to t individual requirements. Daily doses above 3000 mg. not recommended.

Contraindications: Known hypersensitivity to tybamate. ce no studies have been done with this drug in human gnancy, it should not be used in pregnancy unless the tential benefit outweighs the risk.

Warnings: Administer cautiously to patients receiving enothiazines or other CNS depressants or having his-y of convulsive seizures (See Adverse Reactions). Con-er possibility of additive actions with alcohol or other chotropic agents, particularly phenothiazines or MAO ibitors.

Precautions: Avoid abrupt withdrawal after prolonged e, although withdrawal symptoms have not been reported date. Exercise caution in addiction-prone individuals. If mptoms of hypersensitivity occur, discontinue at once d initiate appropriate symptomatic treatment. Avoid ivities requiring optimal mental alertness if drowsiness vertigo are present. As with any new drug, use cautiously patients with history of drug allergies, blood dyscrasias, d hepatic or renal disease; periodic measurements of patic, hematopoietic and renal function should accom-ny prolonged and/or high doses.

Adverse Reactions: Most frequent reactions, rarely re-iring discontinuation of tybamate, include drowsiness, ziness, nausea, insomnia, and euphoria. There have been ew reports of skin rash, urticaria, and pruritus. Rare side ects include hyperactivity, fidgetiness, flushing, and tach-ardia, suggesting excessive stimulation; also ataxia, un-adiness, confusion, feeling of unreality, "panic reaction," igue, headache, paresthesias, vertigo, gastrointestinal turbances, glossitis, and dry mouth. Grand mal or petit l seizures have been reported in a few hospitalized psy-otic patients receiving tybamate (up to 6000 mg. daily) gether with phenothiazines and other psychotropic ents, but not with tybamate alone. Consider the possibil-of rare, serious adverse reactions such as may occur th the related drug, meprobamate. If excessive amounts e ingested, gastric lavage and symptomatic therapy, in-uding central stimulants as necessary, are recommended. fore prescribing, consult package circular.

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Seminar on Infectious Diseases

N. Joel Ehrenkranz, M.D. and Marvin L. Meitus, M.D.

The Nineteenth Annual Postgraduate Seminar of Mount Sinai Hospital of Greater Miami, held May 8-10, 1969, entitled "Infectious Diseases—Clinical and Practical," coincided with an important event—the formal association of the hospital and the University of Miami School of Medicine. The occasion was marked by the presence of a distinguished faculty whose presentations made a great educational impact. Some of the lectures are presented in this issue of the Journal; others will be published in a later issue.

It is appropriate to mention some of the accomplishments of out-of-state members of the faculty.

Dr. Isidore Cohn Jr. is professor and chairman of the department of surgery at Louisiana State University School of Medicine, New Orleans. Administrative duties notwithstanding, he continues an active laboratory investigation program as evidenced by his continuing publications.

Dr. Jay P. Sanford is professor of internal medicine at the University of Texas Southwestern Medical School in Dallas. Before coming to Miami for the seminar, he delivered the presidential address to the American Federation for Clinical Research in Atlantic City. He is currently a member of the editorial board of the Annals of Internal Medicine.

Dr. Morton N. Swartz is associate professor of medicine at Harvard Medical School. After the seminar, Dr. Swartz went to Stanford to work in the laboratory of a Nobel laureate for a sabbatical. He has served as a member of the editorial board of the New England Journal of Medicine.

Dr. Paul F. Wehrle is Hastings professor of pediatrics at the University of Southern California School of Medicine in Los Angeles and left Miami to travel abroad. At present he is in Switzerland for a sabbatical year with the World Health Organization working on the smallpox eradication program.

The seminar, "Infectious Diseases—Clinical and Practical," was clinical and practical and more too, as the ensuing papers and discussions will indicate. It was an auspicious occasion marked by a distinguished faculty and a stimulating program.

Gratitude is expressed to the Editor of the Journal. We thank him for the opportunity, honor and laborious pleasure of being guest editors for this issue.

Dr. Ehrenkranz is professor of medicine and Dr. Meitus clinical instructor in medicine, University of Miami School of Medicine, Miami.

Mechanisms of Antibiotic Action

Morton N. Swartz, M.D.

Antibiotic and chemotherapeutic agents can directly interfere with the proliferation of microorganisms at concentrations well tolerated by the host. This selective toxicity is the essential feature of their function. From the viewpoint of general strategy, antimicrobial drugs can be classified in either of two major categories: bactericidal agents which exert an irreversible lethal effect, and bacteriostatic agents which inhibit bacterial growth while present but whose inhibition is lost upon their removal.

This type of gross distinction between antibiotics on the basis of mechanism of action has clinical relevance to their use. Before examining specific mechanisms several concrete examples might be cited from infectious disease practice. Experience over several decades has shown the superiority of bactericidal over bacteriostatic drugs in the treatment of a specific infection, bacterial endocarditis. Also, in a variety of clinical settings where host defense mechanisms are compromised, as for example in granulocytopenic states, the results of treating bacterial infections with bactericidal drugs have been somewhat more favorable than those with bacteriostatic drugs. This is not surprising, for a bacteriostatic drug only interferes with multiplication of an organism and destruction of the organism requires utilization of the normal cellular (phagocytosis) and humoral (antibody, complement) defenses of the host. Bactericidal drugs are capable of effecting killing outright.

Kinetics of Antimicrobial Action
Bactericidal vs. Bacteriostatic Effect

The effect of antimicrobial agents on bacterial growth may be followed by observing changes in the turbidity of cultures over a period of exponential growth. Several different patterns of growth may be seen with the different agents acting on susceptible organisms. For example, there is a delay of several generations before sulfonamide-induced growth inhibition is apparent. This delay stems from the fact that the sulfonamides act as analogs of para-aminobenzoic acid (PABA), an important bacterial metabolite which is a precursor of folic acid, an essential coenzyme. The sulfonamides prevent new synthesis of folic acid, but before inhibition of bacterial growth occurs the pre-existing supply of folate in the cell must be exhausted. This accounts for the time lag. Chloramphenicol and streptomycin cause an almost immediate cessation of growth as measured by turbidity. However, this observation provides no insight as to whether the organisms are killed or merely converted to a resting state. A different picture is seen with penicillin, which causes lysis of organisms and a drop in turbidity in an osmotically unprotected environment. Such gross lysis bespeaks a bactericidal action.

To establish unequivocally a bactericidal effect, viability of the growth-inhibited organisms must be determined. This is assayed in the laboratory by performing colony counts on solid media of appropriately diluted (so as to eliminate any "carryover" of the antimicrobial agent) samples of the broth culture. Thus, with the sulfonamides and chloramphenicol, the inhibition of growth is not accompanied by a loss of viability as is the case with streptomycin. As would have been predicted from evidence of gross lysis with penicillin in broth cultures, there is a sharp loss of viable organisms.

The differentiation between bactericidal and bacteriostatic drugs seems very sharp, but the distinction is somewhat blurred, depending with some drugs on the concentration employed. The overall basic difference between the two groups of agents seems valid, however, based on the occurrence of a rapid decline in bacterial numbers over several hours exposure.

Classification of Antibiotics
by Gross Mechanism of Action

In keeping with this simplistic and, to some extent, clinically pragmatic categorization of antibiotic action, the commonly used antimicrobial agents can be placed in one or the other grouping (Tables 1 and 2). One might anticipate that the

Dr. Swartz is chief, infectious disease unit, Massachusetts General Hospital, Boston.

From the department of medicine, Harvard Medical School, and the medical service (infectious disease unit) of the Massachusetts General Hospital, Boston.

grossly different effects on growth kinetics of the two groups of agents would be reflected in the biochemical basis of their action. Thus many, but not all, of the bactericidal agents exert their effects on the integrity of the bacterial cell surface, i. e., the cell wall or the cell membrane. In contrast most of the bacteriostatic agents listed appear to exert their effects on one or another of the steps in protein synthesis, or on the DNA replication or transcription steps leading to protein synthesis. Lincomycin might be cited as an example where distinction between a bactericidal and a bacteriostatic agent is fuzzy under certain circumstances. Applying the gross test cited earlier it appears to have a bactericidal effect against the pneumococcus, the growth inhibiting concentration of the drug being essentially the same as the bactericidal concentration. In contrast, the concentration of lincomycin needed for a bactericidal effect against Staphylococcus aureus is at least several times that needed for bacteriostasis.[1] However, evidence localizes the biochemical site of action at the protein synthetic step in the bacterial cell. Inhibition at this locus would be expected to interfere with new protein synthesis, and thus bacterial multiplication, but would not a priori lead to killing of the exposed cell.

Anatomy of the Bacterial Cell

A consideration of the anatomy of the bacterial cell provides a suitable framework on which to examine the sites of action of the various antimicrobial drugs. Indeed the first gross evidences of antibiotic action may be the secondary effects of the agent on the anatomy of the cell: e. g., gross distortion and swelling of gram positive cocci exposed to penicillin.

Table 1. — Bactericidal Antibiotics

1. Penicillin G
2. Semisynthetic penicillins
   ampicillin, methicillin, oxacillin, nafcillin, cloxacillin
3. Cephalosporin and cephaloridine
4. Bacitracin
5. Vancomycin
6. Aminoglycoside antibiotics
   streptomycin, neomycin, kanamycin, gentamycin
7. Polymyxin and colistimethate

Table 2. — Bacteriostatic Agents

1. Tetracyclines
2. Chloramphenicol
3. Erythromycin
4. Lincomycin
5. Novobiocin
6. Sulfonamides

The outermost layer of some bacteria (Group A β hemolytic streptococcus, pneumococcus) consists of a loosely knit capsule which exhibits antiphagocytic activity and accounts for much of the pathogenicity of the organism. In pneumococcus the capsule consists of a polysaccharide whose role in the virulence of a given strain is quite clear. Elimination of the capsule by mutation or enzymatic stripping in vivo converts the organism to an avirulent (rough) form. Thus, a prospective locus of selective antimicrobial action might be on the synthesis of such a structure which has no exact counterpart in the host. However, there is no antibiotic that appears to interfere specifically with bacterial capsular polysaccharide synthesis.

Immediately subjacent to the capsular layer, or in its absence serving as the outermost layer of the cell, is the bacterial cell wall. This is the rigid supporting structure which confers upon the bacterium its characteristic shape. It also protects the cell from mechanical and osmotic trauma. Upon removal of this wall, for example by enzymatic hydrolysis with lysozyme, the fragile underlying cell membrane becomes the limiting structure of the cell. Such "wall-less" organisms, known as protoplasts, can survive as spherical bodies in a protected hypertonic environment, such as 20% sucrose. However, in an isotonic milieu they swell and lyse. A sizeable group of antibiotics including the penicillins, cephalosporins, bacitracin, vancomycin, and cycloserine (a second-line drug sometimes used in the treatment of drug-resistant tuberculosis) interferes at several different points with cell wall synthesis. Fragile protoplast-like structures are produced which undergo cell lysis and death.

The delimiting plasma membrane just beneath the bacterial cell wall is chemically distinct from the cell wall of the same organism and antigenically distinct from the membranes of other bacteria. Antibiotics such as polymyxin and colistemethate act as surface-active compounds, bound to and damaging the bacterial membrane, much like cationic detergents. This damage is manifest by leakage of small soluble molecules and by entrance of a variety of substances that normally would have been excluded. The disruption of the cell surface produced by colistin sulfate can be observed on electron micrographs. The end result is a bactericidal effect and cell lysis.

A third important site of selective antimicrobial action relates to the internal (or molecular) anat-

omy of the cell, i. e., the sites of macro-molecular (DNA, RNA, protein) synthesis. A wide variety of drugs have been found to interfere with nucleic acid or protein synthesis. Many (actinomycin D, puromycin, mitomycin) have been too toxic for clinical use but have been most valuable as tools for the dissection of the steps in bacterial DNA replication, transcription, and translation. Some antibiotics (nalidixic acid and perhaps novobiocin) interfere with the replication or copying of the DNA molecule necessary for cell multiplication.[2] Protein synthesis within the bacterial cell is a highly complex process.

Translation of Genetic Information into Protein Synthesis

The protein synthetic machinery within the cell is made up of polyribosomes, consisting of variable numbers of 70 S ribosomes (containing 30 S and 50 S subunits), connected by a strand of messenger RNA. The latter has been synthesized on a DNA template (transcription) and contains the information for protein synthesis in the sequential arrangement of the purine and pyrimidine bases along its length. Subsequent events in protein synthesis on the individual ribosome of the polyribosome involve at least three major steps:

Recognition: The transfer RNA charged with its specific amino acid (aa-tRNA) enters one ("A slot") of two slots on the ribosome. It is held in place by a specific codon-anticodon affinity between base triplets on the messenger RNA (m RNA) and a recognition site on the transfer RNA.

Transfer: A transferase enzyme transfers a peptide chain from its attachment to a tRNA in a second slot ("P slot") on the ribosome to the incoming aa-tRNA in the "A slot". Free tRNA is then released from the "P slot."

Translocation: The peptide-bearing tRNA plus the hydrogen-bonded attached mRNA move over together from the "A" to "P slot," vacating the "A slot" which now can serve to start a new cycle. The details of the function of the bacterial ribosome in protein synthesis and the role of antibiotic inhibitors have very recently been reviewed.[3]

Antibiotics Inhibiting Protein Synthesis

Current evidence suggests varied but neighboring sites of action for some of the common antimicrobial agents interfering with protein synthesis. The bacteriostatic effects of the tetracyclines appear to be related to their interference with the "recognition" reaction, i. e., the aa-tRNA binding reaction. Chloramphenicol, and also lincomycin, appear to interfere with the peptidyl "transfer" reaction thus blocking polypeptide chain extension. Erythromycin appears to act in a similar but slightly different fashion. Both interfere with polypeptide chain extension. Whereas chloramphenicol blocks the "transfer" reaction, erythromycin blocks the "translocation." Thus, without detailing supporting evidence, discriminatory experiments make it possible to analyze the individual steps of protein synthesis and define the site of action of specific antibiotics. Regardless of the specific site involved, the inhibition of overall protein synthesis results primarily in bacteriostasis.

Antibiotics that Interfere with Biosynthesis of the Bacterial Cell Wall

Knowledge of the mechanism of action of penicillin has resulted from morphologic observations and biochemical investigations of the mucopeptide layer of the rigid basal wall of all bacteria.[4,5] Through the work of Strominger particularly, a detailed chemical definition of the cell wall of S. aureus has emerged.[6]

Morphologic Changes Induced by Penicillin

Although generally overlooked, the initial relevant observation was made by Duguid in 1945

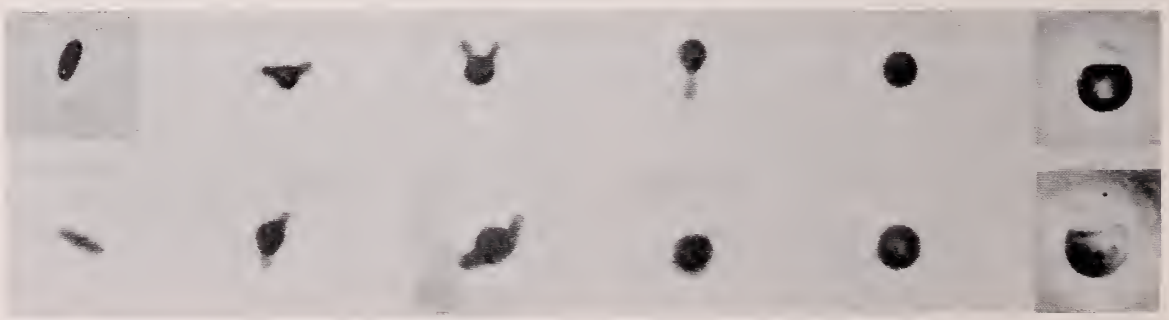


Fig. 1. — Conversion of E. coli cells in sucrose-penicillin broth to protoplasts over the course of four hours. Reproduced from Lederberg and St. Clair[8] with permission.

when he observed under light microscopy that penicillin caused the growing bacterial cell to burst out of the confines of its wall.[7] About 12 years later Lederberg and St. Clair[8] demonstrated that actively growing E. coli cells, exposed to penicillin in hypertonic medium, changed from a rod-like to a spherical form or spheroplast (Fig. 1). These changes were due to interference by penicillin with cell wall formation while the remainder of the cell was permitted to grow. In effect, as the cell grew, its contents extruded from the defects due to failure of wall synthesis.

Utilizing electron microscopy it has been possible to inspect, under much greater magnification, the effect of penicillin on the morphology of the cell wall. Absence of cell wall for varying distances along the cell perimeter has been noted in susceptible cells treated with penicillin (Fig. 2). Fitz-James[9] reported the accumulation of masses of fibrous material between the cell wall and protoplast membrane in electron microscope sections. Such disorganized masses could represent the piling up of macromolecular precursors of cell wall that have not been completed as the result of a penicillin-induced block. This is consistent with biochemical studies of the nature of penicillin action.

Structure of the Cell Wall

Paralleling the increasingly more detailed observations on the morphologic evidences of penicillin action, there has emerged a reasonably clear picture of the chemistry of the bacterial cell wall and the alterations induced by antibiotics. In 1949, before most of the morphologic observations had been made, Park[10] noted the accumulation, in broth cultures of S. aureus treated with penicillin, of a most unusual compound ("Park nucleotide") consisting of a nucleotide (uridine diphosphate), a unique hexosamine (N acetyl muramic acid), and a pentapeptide (Fig. 3). The basis for this finding did not become evident until purified cell wall preparations, obtained by mechanical disruption of cells, were shown to contain the same unique hexosamine and the same amino acids as were found in the "Park nucleotide." This suggested the role of this nucleotide as a carrier for the individual unit of the cell wall. An important attribute of the cell walls was their rigidity which was quite clearly shown when such preparations, obtained from gram positive cocci,[11] were purified by differential centrifugation. They retained their circular form quite consistently, showing their role in vivo, in defining bacterial shape.

Stemming from a series of elegant studies, principally by Strominger and his associates,[12] the basic chemical structure of the bacterial cell wall (in S. aureus and several other organisms) as well as the pathway of its biosynthesis has been elucidated. The mucopeptide obtained from the

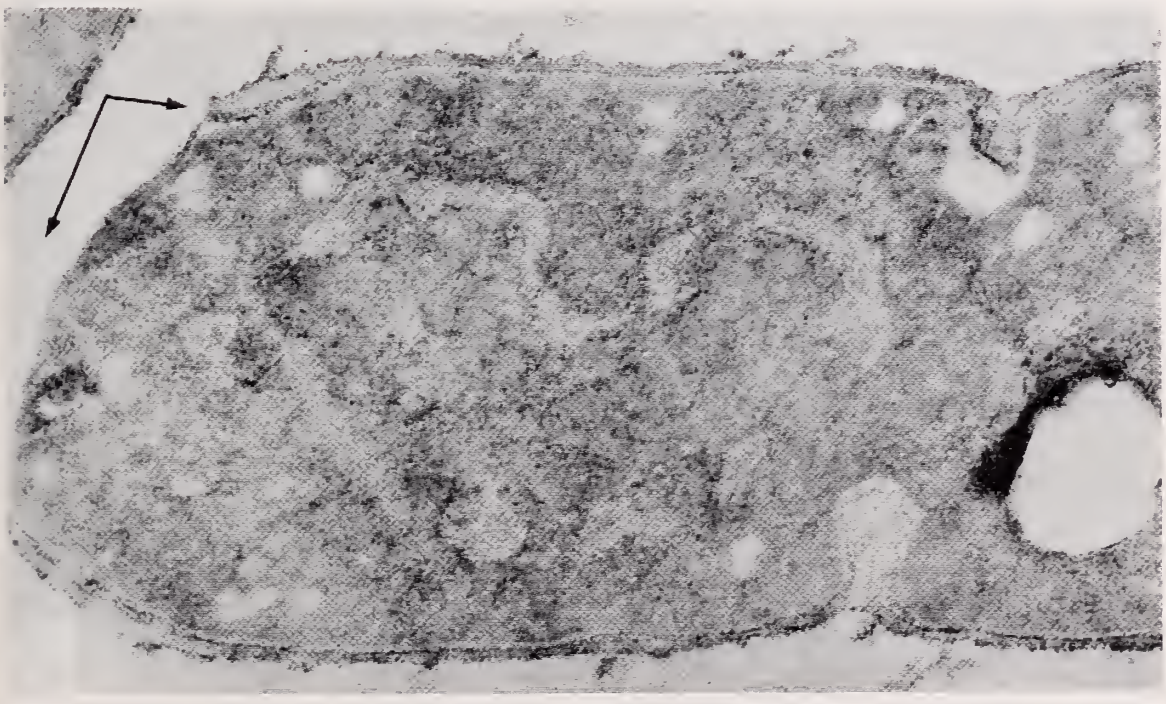


Fig. 2. — Electron micrograph of B. megaterium cell after two hours' growth in presence of penicillin in protoplast-stabilizing buffer. Wall loss shown by arrows. Reproduced from Fitz-James and Hancock[9] with permission.

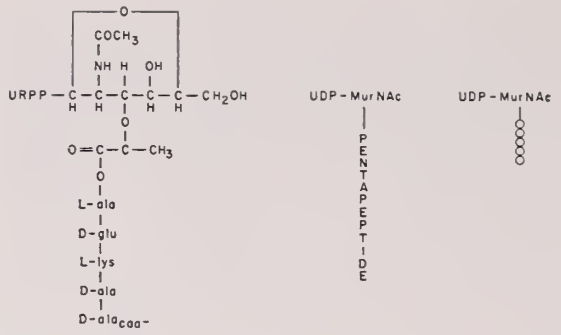


Fig. 3. — Uridine nucleotide accumulating in broth cultures of S. aureus treated with penicillin. Chemical representation on the left. (U — uracil; R — ribose; P — phosphate; ala — alanine; glu — glutamine; lys — lysine). Schematic representation on the right showing uridine nucleotide attached to N-acetyl muramic acid (MurNAc) to which is appended, in turn, the pentapeptide.

isolated cell walls, when digested by the enzyme lysozyme, is hydrolyzed to equimolar amounts of the two amino sugars, N-acetyl muramic acid (MurNAc) with its appended pentapeptide chain and N-acetyl glucosamine (GNAc). These are arranged as alternating units and their repetition forms the mucopolysaccharide backbone of the cell wall (Fig. 4). The wall then can be visualized as consisting of a variable number of such linear polymers arranged in parallel and in a third dimension, and enveloping the cell. There would seem to be an important deficiency in this model for a rigid, containing structure; namely, it allows for considerable slippage. One strand could slip to the right or left of companion strands or pull apart from another. Ideally, there would seem to be need for some sort of inter-connecting structure or crosslink to prevent such slippage. In fact such a crosslinking molecule does exist.

Biosynthesis of Cell Wall Precursors

Starting with the knowledge of the structure of the "Park nucleotide" and the occurrence of GNAc and MurNAc-pentapeptide in the cell wall, it was assumed that these repeating units were constructed in a stepwise fashion. On the basis of

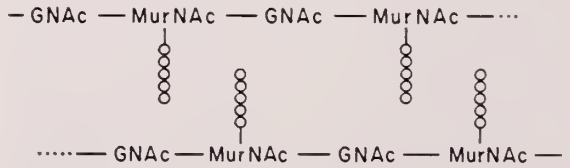


Fig. 4. — Schematic representation of two of many polymer chains making up the bacterial cell wall. Chains consist of alternating units of N-acetyl glucosamine (GNAc), and N-acetyl muramic acid (MurNAc), the latter bearing an appended pentapeptide.

in vitro enzymatic studies, Strominger has shown the need for 15 different enzymes in the synthesis of the completed "Park nucleotide." The major steps start with the uridine nucleotide UDP, go on to the addition of the amino sugar (GNAc), and then conversion of the latter to MurNAc by the enzymatic addition of a lactyl group. Subsequent reactions involve the stepwise addition of the specific amino acids comprising the pentapeptide. The antibiotic cycloserine interferes rather specifically in this reaction sequence. Like penicillin, it causes spheroplast formation, cell lysis, and muramic nucleotide accumulation. Biochemically it acts as an antimetabolite of alanine, preventing (1) the conversion of L-alanine to D-alanine and (2) inhibiting the enzyme converting D-alanine to the dipeptide D-ala-D-ala, the terminal sequence of the pentapeptide.

Synthesis of Cell Wall Heteropolymer

The reactions in S. aureus extracts by which the muramic nucleotide is transferred to the nascent cell wall have been delineated by Strominger and his associates[13] in studies of the site of action of penicillin. The initial step involves transfer of the muramic pentapeptide from its nucleotide carrier to a lipid carrier. The lipid carrier may transport the prefabricated cell wall. Although the "Park nucleotide" accumulates in penicillin-treated cells, this step is not the one blocked by penicillin. Next, an acetyl glucosamine residue is added to the lipid carrier-muramic peptide complex, providing the basic unit reiterated throughout the mucopeptide of the cell wall. Sequentially, five glycine residues are then added from glycyl t-RNA in the form of a tail attached to the ε-amino group of lysine in the pentapeptide. The transfer of the disaccharide-pentapeptide "building-block" to the growing end of the cell wall is then effected releasing the P-lipid acceptor. It appears that vancomycin acts at this point by blocking the transfer from the lipid intermediate. Bacitracin appears to inhibit the regeneration of the free lipid carrier, thus blocking the recycling of the series of reactions.

The Site of Penicillin Action

All of these reactions leading to synthesis of the linear cell wall mucopeptide have been studied and shown completely insensitive to penicillin.[13] The last step in mucopeptide synthesis, however, is the penicillin-sensitive step. This involves forging a cross-link through the reaction of the pentaglycine chain with the terminal D-ala-D-ala peptide

bond in a neighboring linear mucopeptide chain. In this transpeptidation reaction the terminal D-ala residue is released from the pentapeptide. Penicillin blocks this reaction and renders the cell wall weak, non-rigid. The final structure of the normal cell wall then can be visualized as highly cross-linked. (Fig. 5) The pentaglycine bridges connect one peptide chain with another on a neighboring polymer molecule. At the growing end of the wall unlinked pentaglycine bridges dangle preparatory to uniting adjoining polymers.

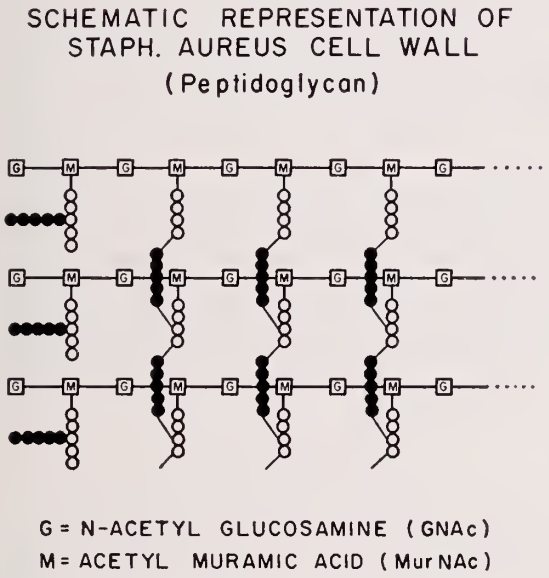


Fig. 5. — Schematic representation of S. aureus cell wall (modified from Strominger and Tipper[6]). Pentaglycine cross-links are shown on the right and three free pentaglycine chains are shown on the growing end of the macromolecule on the left.

The Future

It has been possible over the past decade to develop a detailed understanding of the molecular mechanisms of antibiotic action. Admittedly, thus far the information obtained has been of more value in enhancing our knowledge of bacterial structure than in developing newer successful antimicrobial agents. The diminishing returns from the empiric search for promising antibiotics increase the importance of utilizing the available biochemical knowledge of unique bacterial properties (cell wall structure, bacterial protein synthesis, etc.) for the designing of newer antibiotic agents. The recent development of the semisynthetic penicillins is hopefully only a beginning in this direction.

References

1. McCall, C. E.; Steigbigel, N. H., and Finland, M.: Lincomycin: Activity in Vitro and Absorption and Excretion in Normal Young Men, Am. J. Med. Sci. 254:144-155, 1967.
2. Carter, W. and McCarty, K. S.: Molecular Mechanisms of Antibiotic Action, Ann. Int. Med. 64:1087-1113, 1966.
3. Weisblum, B. and Davies, J.: Antibiotic Inhibitors of Bacterial Ribosome, Bacteriol. Rev. 32:493-528, 1968.
4. Salton, M. R. J.: Anatomy of Bacterial Surface, Bacteriol. Rev. 25:77-79, 1961.
5. Perkins, H. R.: Chemical Structure and Biosynthesis of Bacterial Cell Walls, Bacteriol. Rev. 27:18-54, 1963.
6. Strominger, J. L. and Tipper, D. J.: Bacterial Cell Wall Synthesis and Structure in Relation to Mechanism of Action of Penicillins and Other Antibacterial Agents, Am. J. Med. 39:708-720, 1965.
7. Duguid, J. P.: Sensitivity of Bacteria to Action of Penicillin, Edinburgh M. J. 53:407, 1945.
8. Lederberg, J. and St. Clair, J.: Protoplasts and L-type Growth of Escherichia coli, J. Bact. 75:143-160, 1958.
9. Fitz-James, P. and Hancock, R.: Initial Structural Lesion of Penicillin Action Bacillus Megaterium, J. Cell. Biol. 26:657-667, 1965.
10. Park, J. T. and Johnson, M. J.: Accumulation of Labile Phosphate in Staphylococcus aureus Grown in Presence of Penicillin, J., Biol. Chem. 179:585-592, 1949.
11. Salton, M. R. J. and Horne, R. W.: Studies of Bacterial Cell Wall. II. Methods of Preparation and Some Properties of Cell Walls, Biochem. et Biophys. Acta 7:177-197, 1951.
12. Matsuhashi, M.; Dietrich, C. P., and Strominger, J. L.; Biosynthesis of Peptidoglycan of Bacterial Cell Walls, J. Biol. Chem. 242:3191-3206, 1967.
13. Strominger, J. L.; Izaki, Ki; Matsuhashi, M., and Tipper, D. J.: Peptidoglycan Transpeptidase and D-alanine Carboxypeptidase: Penicillin-Sensitive Enzymatic Reactions, Fed. Proc. 26:9-22, 1967.

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Approaches to Rational Antibiotic Usage

Jay P. Sanford, M.D.

The rapid advances in development of antimicrobial agents pose a therapeutic dilemma. There has been no concurrent advance in the technique for bacteriologic diagnosis. With the help of laboratory tests, it is possible to arrive at a diagnosis after a time, but optimal antibiotic usage depends upon rational diagnoses at the bedside. The sign that triggers the thought process of infection is the occurrence of fever. This is usually the prime indicator that a patient has some type of infection for which antimicrobial therapy may be indicated.

You have all seen advertisements in many medical journals which read "See fever-think drug X or Y." From the standpoint of rational antimicrobial therapy, such advice is not clinically sound.

Infections and Fever

When seeing a patient who is febrile, you must ask yourself: Is the fever the result of infection or is it due to some non-infectious process? There are a variety of non-infectious conditions associated with fever. Perhaps the most important is that caused by a drug. Any time you see a patient with fever who has been taking a drug for five days or more, this should be considered. If you think the fever results from an infection, then you need to decide whether some form of antimicrobial therapy is indicated. There are a great number of infections associated with fever which are not susceptible to antibiotic treatment. For example, viral infections at the present time are not susceptible to the commercially available chemotherapeutic agents. By contrast, other non-bacterial infections, such as those due to fungi, rickettsiae or parasites, may respond to carefully chosen specific chemotherapeutic treatment.

After seeing the patient who has fever and considering history, physical examination and the type of laboratory evaluation you carry out in your office, you may decide that the disease is treatable. Having gone this far, you are ready to think in terms of making correct clinical bacteriological diagnosis. There are several questions to be asked: First, where is the infection? For example, does the patient have pneumonia? This may be an appropriate diagnosis for which there is a code number; yet, from the standpoint of the patient, you have not gone far enough. Thus the second question: what are the most likely causative organisms? In this patient, what is the cause of the pneumonia? This you may be able to determine by a variety of tests. One of the most useful is a smear of the sputum stained with gram stain, methylene blue stain, or other stains. Third: what is the antimicrobial sensitivity of the likely infecting organism?

Many Etiologies

For example, an elderly individual presents with a fairly abrupt onset of chest pain associated with a cough productive of purulent sputum, with some blood tinging. On x-ray, there is a fairly dense upper lobe infiltrate. Depending on the modifying factors, there are many etiologies which one should consider: has this patient recently been in the hospital? If he was just recovering from influenza, you might think of staphylococci as a likely possibility. If the patient has chronic obstructive airway disease or was an alcoholic, klebsiella and enterobacter (aerobacter) should be considered. Alternatively, this may be a problem of pneumococcal infection. On microscopic examination of the sputum, if you see a predominance of rather large gram negative bacilli, obviously the patient does not have pneumococcal or staphylococcal pneumonia. Having proceeded this far, you then have to carry the reason to the next step: to what are these organisms apt to be sensitive? At this point if you decide to treat the patient with

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a fixed combination of penicillin-G and streptomycin, you might just as well not have gotten out of bed that morning. You might just as well have never known that the patient had fever, pneumonia, that the gram stain demonstrated gram negative bacilli, because statistically, the odds are against the form of therapy you have chosen.

Today, only a small minority of klebsiella or enterobacter strains are susceptible to streptomycin and all are resistant to penicillin-G. All too frequently, physicians proceed through a rational sequence of evaluation and then get right down to selecting an antimicrobial agent based upon a reasonable bacteriologic diagnosis and yet select an inappropriate agent. When you have selected an inappropriate agent, this is analogous to a football player running to the one yard line with the ball and fumbling. You do not get any points for this. The way to win a ball game is to cross the goal line. As far as the patient is concerned, this is the only point he is interested in your reaching.

While we can talk in general terms about antimicrobial sensitivities, and will do so during the course of this seminar, local differences may exist. An agent may be effective against bacteria in Dallas, but not in Miami and vice versa. Physicians should know patterns of antimicrobial sensitivities for their own communities.

Pharmacology of Antibiotics

Having decided what antimicrobial agents are the most likely to be effective, you may still be faced with an additional series of choices. It is essential to be familiar with the pharmacology of the various antimicrobial agents. How well they are absorbed in the gastrointestinal tract is a very important consideration. Many physicians are unaware of absorption characteristics or fail to realize that sick people may have less effective absorption of antibiotics when administered orally. The literature on antibiotic absorption studies derives from investigation of groups of 10 to 20 normal, healthy, ambulatory volunteers. Yet, for the most part, you and I are not treating normal, healthy volunteers. In addition, consideration of distribution of the antibiotic is essential in the selection of certain agents. In patients with meningitis, for example, massive doses of most antibiotics such as penicillin are necessary if one is not using non-polar antibiotic compounds such as chloramphenicol. This is not because the infecting organisms, such as pneumococci or meningococci are resistant, but because of the blood:cerebrospinal fluid gradient which must be overcome. For instance, under normal circumstances, the ratio between penicillin levels, blood and spinal fluid is 100:1. With meningitis, the ratio decreases, but it is still necessary to give very large doses of penicillin to patients with meningitis to achieve a therapeutic level in the spinal fluid. The same holds true with infections involving the eye. Some of us are critical of our colleagues in ophthalmology, whom we feel abuse the use of chloramphenicol. Yet, chloramphenicol is one of the few antibiotics which readily crosses from blood into aqueous humor. When an ophthalmologist is dealing with a suppurative infection in the anterior chamber and wants drugs to penetrate there, he can achieve this with systemic chloramphenicol. Otherwise it is necessary to give subconjunctival injections of other antibiotics that penetrate less well when given systemically.

Side Effects

As well as understanding the pharmacology of antibiotics, physicians need to think in terms of toxicity. You should select the most effective drug which is potentially the least toxic. There are biologic complications which are associated with many of the broad spectrum antibiotics. Knowing the causative microorganism, you use an antibiotic with a limited spectrum to minimize the biologic side effects of changing normal host microflora.

There is no such thing as an antibiotic which does not have some side effects. This is one of the strong arguments against taking the position, "Well, the patient has fever and I'll just go ahead and use this antibiotic, because at least I can't hurt him with that particular drug and I might cover something." You may be as apt to hurt him as to help him with this type of reasoning.

Summary

In summary, as you approach patients with fever, you must ask yourself: is the fever due to infection? Is the infection susceptible to an antimicrobial agent? Where is the infection? What is the infecting organism? To what antimicrobial agents is this organism likely to be susceptible, and of these agents which is the most efficacious and the least toxic?

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Antibiotics and the Kidney
With Special Reference to the Aged

Ronald W. Shane, M.D.

Decreased renal function may significantly prolong the half-life of most antibiotics and, conversely, much has been written on the effect of antibiotic-produced decreased renal function. This review and the geriatric preponderance in the local populace of Greater Miami, Florida, stimulated a reevaluation of renal function in the aged and will be presented briefly here.

Those antibiotics whose half-life is prolonged with renal failure and oliguria are listed in Figure 1, first column. All the commonly used antibiotics are listed; therefore, any toxic effects or even allergic manifestations of these agents may be initiated or aggravated with a marked decrease in renal function. Those antibiotics which may in turn produce renal failure and azotemia are listed in the second column. The penicillins, including the synthetic analogs, and the tetracyclines are separated because they probably do not produce a direct toxic effect to the kidney.

The penicillins cause a nephritis-like picture, probably on an allergic basis. Peculiarly, this may be more common in those individuals who already have renal insufficiency. The tetracyclines may cause a rising BUN for two different reasons: (1) Outdated tetracycline with its brown-black discoloration may produce a Fanconi-like picture with renal tubular acidosis. (2) High serum levels of tetracycline can produce significant elevations of BUN without concomitant rise in creatinine and uric acid. This negative nitrogen balance appears to be attributable to an anti-anabolic effect of the drug.

The most commonly used nephrotoxic drugs in the Miami area are kanamycin (Kantrex), colistin (Coly-Mycin) and cephaloridine (Loridine). It is of utmost importance to be familiar with the descriptive literature before administering them. Renal failure and uremia due to misuse contribute to deaths in large part. It is of interest that neomycin and possibly kanamycin, given orally, may produce significant serum levels in patients with decreased renal function, and, in turn, aggravate renal insufficiency.

Decreasing Renal Function

I believe there are three basic reasons for the relatively large number of patients with decreasing renal function secondary to nephrotoxic drugs:

(1) Physician Unawareness

Unfortunately, it seems these relatively new antibiotics must show their effect personally before they are used with proper caution. Most physicians are not impressed by their toxic potency until they see or know of a specific instance where renal failure has ensued. Once "burned," they usually take appropriate precautions. Also, many physicians are not aware of the adverse affects of the newer antibiotics they administer, simply because they do not take the time to read the literature. For example, Loridine was commonly considered nothing more than a less painful intra-

INCREASED SERUM LEVELS OF THE MORE POPULAR ANTIBIOTICS IN PATIENTS WITH RENAL DISEASE	NEPHROTOXIC ANTIBIOTICS
AMPHOTERICIN B	AMPHOTERICIN B
BACITRACIN	BACITRACIN
CEPHALOSPORINS	CEPHALORIDINE
CHLORAMPHENICOL (conjugates)	COLISTIN
COLISTIN	(GENTIMYCIN)
ERYTHROMYCIN	KANAMYCIN
(GENTIMICIN)	NEOMYCIN
KANAMYCIN	POLYMYXIN B
LINCOMYCIN	
NEOMYCIN	PENICILLINS
PENICILLINS	TETRACYCLINES
POLYMYXIN B	
STREPTOMYCIN	
TETRACYCLINES	

Figure 1.

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muscular injection of Keflin and, therefore, could be given without fear of nephrotoxicity. The company specifically states in italicized letters that Loridine should never be given to patients with azotemia.

(2) Distribution and Weight

It is important to recognize that total body water, blood volume, and antibiotic distribution volume are not the same for a 100 pound patient as for a 200 pound patient. When calculated on a weight basis, the former is one half of the latter. Therefore, these drugs cannot be given as a routine dose for an adult, which is so often done; instead, a dose-weight relationship must always be kept in mind. In our geographic area, it is very common to find small, lean, elderly patients in whom minimum effective therapeutic serum levels of antibiotics can be attained with a far lesser dose than that of a larger adult.

(3) Renal Function

Many dosage schedules have been recommended for antibiotics according to the degree of renal insufficiency. The degree of renal insufficiency is judged by BUN, NPN, creatinine levels and urea, and creatinine clearances and categorized as moderate to severe.

Indicators of Renal Function

Because of non-renal influences on BUN, NPN, and urea clearance, the serum creatinine and creatinine clearance have been more popularly used as the best practical indicators of renal function.

Since most of my observations of nephrotoxicity were in the elderly, I evaluated the serum creatinine and creatinine clearance in patients confined to Mount Sinai Hospital. They were selected at random, without regard to diagnosis, excluding those with known renal insufficiency.

Shock has evaluated renal function in the aged with sophisticated means of inulin and diodrast clearance. His results show approximately a 50% decline from the 20-30 age group to the 80-90 age group. His methods of evaluation are not possible in a clinical situation; moreover, patients with coronary artery disease, myocardial insufficiency and hypertension are excluded. This, too, is not clinically practical since many, if not most, of the elderly patients admitted to Mount Sinai would include these entities. Most of our patients also would be likely to receive antibiotic therapy. Further, some of our selections might be on the surgical services with implied deterioration of renal function if surgery were performed, and they, too, would have a better chance of receiving antibiotics.

The procedure followed by my associates and me included a 24-hour urine collection with a serum creatinine determination prior to and at completion of collection. Many tests were disregarded because of change in serum levels of more than 10%, obviously inadequate urine collections, and serum creatinines over 3.0 mg./100 cc.

Other than the valid argument that creatinine clearance may not closely reflect glomerular filtration rate, errors are inherent either in the laboratory technique or urine collection, or both. To minimize these factors, we tested frozen specimens in duplicate 2-3 days after initial collection and found results to vary no more than approximately 15%. We also used specimens from a number of patients with indwelling catheters, many of whom were in intensive care units, to help insure accurate collections.

The data are graphically shown in figures 2, 3, and 4. Figure 1 illustrates a significant fall in creatinine clearance with age, especially after age 60. This fall appears to be more than the 50% shown by Shock. However, our young age (20-40) group consisted mainly of ambulatory interns and residents. Figure 3 indicates a decrease in 24-hour creatinine excretion and consequently would indicate that less creatinine is being produced. Figure 4 shows that serum creatinine in the elderly patient is not a good indicator of renal function, since creatinine clearance can vary markedly when the serum creatinine is in the range of 0.8 - 1.3 mg./100 cc.

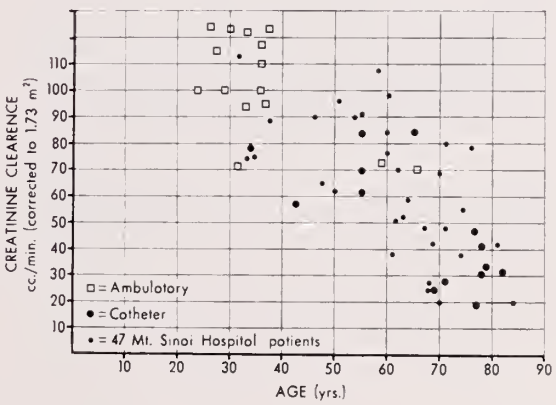


Fig. 2. — Decrease in creatinine clearance with age irrespective of diagnosis. No patients with obvious renal disease are included. Theoretically the inulin clearance would be lower since the creatinine/inulin clearance ratio is greater than 1. This ratio is even higher with decreasing renal function indicating a sharper decline in inulin clearance with advancing age.

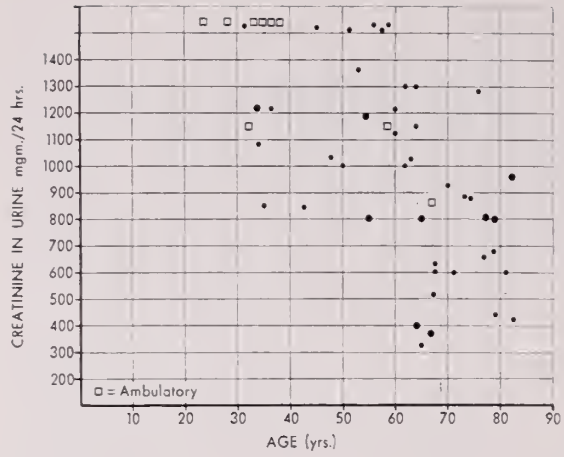


Fig. 3. — This reflects a decreased excretion of creatinine, especially over the age of 60.

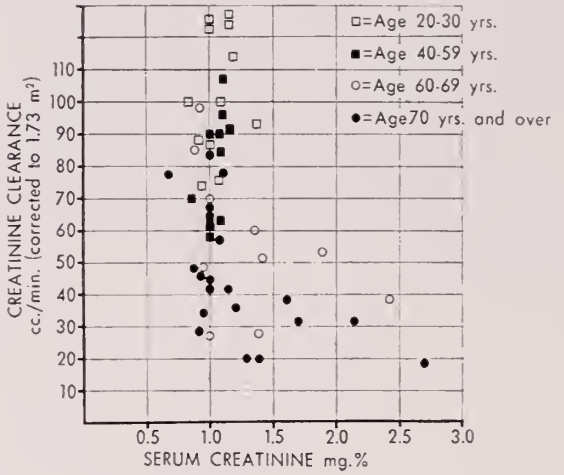


Fig. 4. — The serum creatinine is a poor indicator of renal function. With a serum creatinine of 1.0 mg./100 cc. or less, the creatinine clearance can be below 30 cc./min.

Conclusion

In essence we conclude that the elderly patient produces less endogenous creatinine and, therefore, may have markedly diminished renal function but still maintain a normal serum creatinine. Because of this variability in interpretation, a definite program for antibiotics cannot be given to insure therapeutic levels with no nephrotoxic hazards.

Certain guidelines should be followed:

1. Be aware of the potential hazards of the prescribed antibiotic, especially in people with proven renal insufficiency and in the aged.

2. Be certain of the indications for the drug and administer it according to dose-weight relationship.

3. Just prior to and after administration of the drug, observe BUN and creatinine for rising change. Frequent creatinine clearances done correctly are preferable, but have many inherent errors and may be more misleading than helpful in most hospital situations.

4. Don't look for oliguria before discontinuance of antibiotics, since, unlike most other acute renal failures, these patients may urinate good quantities (800 cc. and more per day) in spite of decreasing renal function.

A valuable adjunct would be a rapid and accessible means of determining serum concentrations of antibiotics. We are looking forward to the time when this is more available.

After writing this article and reviewing the literature for it, I feel compelled to relate a short poem entitled "A Patient to his Kidneys."

> Oh precious kidneys please clear the drug
> That was meant to kill the bug.
> Be prepared and you'll be spared.
> There's no retreat—you must excrete—
> For if you fail to filter thru
> The future's grim for both of you . . . and me.

I am indebted to Gladys Vizcarra, M.D., Bertha San Pedro, and the Mount Sinai Hospital Laboratory for aid and technical assistance.

A representative bibliography is available from the author upon request.

▶ Dr. Shane, 1680 Meridian Avenue, Miami Beach 33139.

Questions and Answers

Urinary Tract Infections Presentations

QUESTION

I wonder if our two speakers would address themselves to the question of the necessity of a "loading dose" of kanamycin and also the possible toxicity of nephrotoxic antibiotics, particularly kanamycin, when used in association with diuretics.

JAY P. SANFORD, M.D.

The concept of whether or not you need a loading dose of drugs has been argued through the years. I think the majority of individuals take the position that, if you are treating a life-threatening infection which is usually the situation when you're using kanamycin, it is wise to use a "loading dose" calculated on a weight or per square meter basis. It is important to realize that despite the fact that a person has renal insufficiency, you don't diminish the initial dose. Your problem is not toxicity on the first dose but rather accumulative toxicity. This is particularly true in the patient who has underlying renal disease or, with age, progressive decrease in renal function. Dr. Shane has made the important point that these "loading doses" are calculated on the basis of normal people.

The use of these drugs in association with diuretic therapy could probably extend to other situations. Reasonable data suggests that such things as some of the gallbladder dyes, in conjunction with nephrotoxic drugs, will demonstrate significant nephrotoxicity. Dr. Allan Johnson, from Emory, reported in January at a small meeting we had, that a series of patients treated with some of the very potent diuretic agents such as furosemide and ethacrynic acid, along with kanamycin and colistin, became deaf with a single dose of drugs. Now the diuretics themselves may have ototoxicity, as well as the antibiotics. The problem of synergistic toxicity not only for the vestibular apparatus but for the kidneys must be kept in mind.

QUESTION

What is the role of dialysis in relation to the various nephrotoxic antibiotics?

RONALD W. SHANE, M.D.

Of the three nephrotoxic drugs that we use at the moment, both kanamycin and cephaloridine are dialyzable. Many people feel that you can dialyze on hemodialysis as well as peritoneal dialysis. With cephaloridine, the acute hemodialysis is much more efficacious than the peritoneal dialysis. Colistin does not dialyze well.

DR. SANFORD

If you have a patient who, particularly with kanamycin, may have evidence of early deafness it probably is indicated, right at that moment, to initiate dialysis. This can be done more efficiently by hemodialysis; however, peritoneal dialysis would be a reasonable alternative. Another point in terms of kanamycin, and particularly ototoxicity, is one which Murdock of Britain makes. That is, administer the drug on an every six hour basis instead of an every 12 hour basis, which somehow has become practice in this country. In this manner, the very high peak levels are avoided and Murdock feels they avoid much of the ototoxicity.

QUESTION

Do you feel that it would be sufficient to follow the urine for protein and red blood cells in a patient who is being treated with kanamycin?

DR. SHANE

If you're giving kanamycin and getting red cells and albuminuria you certainly have to suspect kanamycin as its etiology, if you did not have it before you gave the kanamycin.

PAUL F. WEHRLE, M.D.*

We have used a lot of kanamycin over the years and have yet to get into difficulty with it. We stay, as has been indicated, within the 15 mg. per kilogram per day, watch hydration, and we have always used the every six hour or every four hour division of dosage, so that we do not have the peak at 12 hour intervals with a bigger amount given at that point. I think that these principles have kept us completely out of trouble.

DR. SHANE

In the population we see here, I don't encourage 15 mg. per kilogram of Kantrex or kanamycin. The patients have a markedly decreased renal function and it would remain to be seen that when I gave 10 mg. per kilogram my serum levels would be just as good in these people. Another thing, which is very important, is that the urinary sediment and the urinary volume do not necessarily have to decrease to indicate nephrotoxicity. One fortunate or unfortunate thing is that a patient can get markedly decreasing renal function while he has good urinary output, as opposed to acute tubular necrosis or shock-like kidney. We have seen many people continue to demonstrate a rise in their BUN or creatinine, we diagnose a nephrotoxic drug, and they still put out 1,000 of 1,500 cc. per day. Don't wait for oliguria to diagnose nephrotoxicity.

QUESTION

What is your choice in the simple problem, the simple E. coli infection, when all the antibiotics tested turn out to be sensitive? Which one do you use, and how long do you use it?

DR. SANFORD

If this is a first acute episode infection, which usually is in the young woman, I would actually use as my initial therapy, sulfonamide, on an outpatient basis. If the patient were hospitalized, I would probably use an antibiotic rather than a sulfonamide, but this is on an emotional basis rather than a scientific basis. Normally, we treat such individuals from 10 to 14 days. Perhaps the most critical thing to point out is—when you start patients on therapy, virtually all who are going to respond will have their urine free of bacteria in 72-96 hours. If bacteria are still present in the urine 72 hours after starting, there is no point in continuing that drug a longer period of time. You have to assume that these patients have obstructive disease, or you have picked the wrong drug, or something else is involved and you might just as well switch. We try to be quite compulsive about looking at the urine at 72-96 hours, and then continuing the therapy, if they are doing well. Now, whether you should go seven days, 10 days, or 14 days, people will argue back and forth. Let me point out that if you use water with no antibacterial activity whatsoever, or use Pyridium with no antibacterial activity whatsoever, in that patient you can achieve an 80% bacteriologic cure.

We have turned away from the use of long-acting sulfonamides, but primarily because of the increased frequency of skin reactions of the Stevens-Johnson type, with at least some of these compounds.

QUESTION

Which antibiotic would you use if the sulfonamides were not effective? Which antibiotic would you prefer?

DR. SANFORD

I would personally use either tetracycline or ampicillin, depending on the patient's allergic history and other factors, and also upon the economics of the drug. These vary from locality to locality.

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Peritonitis

Prevention and Cure

Isidore Cohn Jr., M.D.

Peritonitis is a highly lethal disease and, in spite of advances in antibacterial techniques, the best treatment remains prevention. The most common cause of peritonitis is rupture of some intra-abdominal viscus due to disease within that viscus, or its rupture following either penetrating or non-penetrating abdominal injury. Other causes are relatively uncommon and will not be considered. In addition to direct mortality from peritonitis, it is important to recognize the high incidence of wound infection with peritoneal contamination, and the associated prolongation of hospitalization.

Since peritonitis is basically a bacterial inflammation of the peritoneal cavity, it is appropriate to focus attention on advances in therapy which have resulted from antibacterial agents. In the process of looking more carefully at their role, we should not lose sight of the primary importance of basic surgical care of the offending viscus by whatever means are appropriate. Thus, appendectomy is the prime treatment for acute appendicitis. Similarly, the treatment of a perforation of the gastrointestinal tract is closure, exclusion, or defunctionalization of the perforated area, along with other necessary supportive measures.

Antibacterial agents have been placed directly in the peritoneal cavity since introduction of the sulfonamides in 1940.[1] Almost every antibacterial agent introduced since that time has been injected intraperitoneally; almost all have been abandoned for various reasons. At the present time, the only antibiotics commonly injected into the peritoneal cavity are kanamycin and cephalothin. Penicillin is administered but its very rapid absorption means that it is not an ideal agent.

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Modern Therapy

In an effort to study the modern therapy of peritonitis, my associates and I have divided our laboratory and clinical approaches into several different phases. The first objective was to determine which antibiotics were safe when placed in the peritoneal cavity.[2,3] Kanamycin, neomycin and tetracycline were injected intraperitoneally into non-anesthetized dogs and rabbits. Tetracycline caused too much pain, and the intraperitoneal adhesions were troublesome. Neomycin was tolerated in a higher dosage, but there was too little distinction between a safe and a lethal dosage. By contrast, kanamycin could be injected intraperitoneally in a very large dosage without any evidence of toxicity and, therefore, seemed to be the drug of choice.

When the three agents were injected into the peritoneal cavity of dogs anesthetized with ether, the superiority of kanamycin again was emphasized, whereas the toxicity of neomycin in combination with ether made this an undesirable agent.

The next step was study of the efficacy of intraperitoneally administered kanamycin in the treatment of experimental appendiceal peritonitis, a comparable condition in which it might be used clinically.[4,5] Appendiceal peritonitis was produced in dogs by ligation of the base of the appendix and division of all of its blood supply, followed by intra-oral administration of an appropriate dose of castor oil. Under these circumstances, a single dose of kanamycin at the time of the operative procedure was sufficient to significantly reduce the mortality from this type of peritonitis.

When therapy was delayed for 24 hours after the production of peritonitis, intraperitoneal kanamycin produced a significant lowering of mortality as compared with control animals. Intraperitoneal

administration of kanamycin was superior to intramuscular administration. The higher levels of kanamycin in the peritoneal cavity may have explained its superiority in part, but the observation that intraperitoneal administration produced higher serum levels than intramuscular administration was an unexpected finding. At 72 hours there was a lower incidence of positive blood cultures if the kanamycin was injected intraperitoneally than if it was administered intramuscularly.

More recent studies comparing cephalothin and kanamycin have shown higher levels of cephalothin in both peritoneal fluid and serum when the two are administered under comparable conditions.[6] Cephalothin is somewhat more effective than kanamycin under these circumstances; however, the difference is not statistically significant. Cephalothin seems to be more effective when given immediately, when treatment is delayed, or when treatment is started at late intervals.

Other Conditions Leading to Peritonitis

These investigations have centered on the study of appendiceal peritonitis because it is relatively easy to produce experimentally and is most frequently seen by the clinician. However, it is by no means the only form of peritonitis. Other conditions which may lead to peritonitis have also been studied in our department.

Strangulation obstruction has been one of our keen interests for some time.[7] Clinically bacteria has been a significant factor in the overall results in strangulation obstruction, but experimental demonstration of its true role had to await development of antibiotics. Experimental work shows that parenterally-administered penicillin or broad-spectrum antibiotics prolong survival in strangulation obstruction, but death usually occurs within 72 hours. If adequate quantities of the antibiotic are placed directly into the strangulated segment of bowel, a lethal result can be averted and the bowel which has been deprived of its blood supply will return to normal. This, of course, presumes that adequate fluid, electrolyte and blood replacement are all taken care of simultaneously. As an extension of this work, germfree dogs subjected to strangulation obstruction without treatment of any kind survive 100 hours. At this time the strangulated segment of bowel can be resected or left in situ with restoration of intestinal continuity and the animals will survive.[8] These data show quite clearly that the lethal result is dependent upon bacterial multiplication within the strangulated loop of bowel. Multiplication leads to release of organisms and their toxins into the peritoneal cavity, and the resulting death of the animal, or of the patient.

There is only one clinical study which indicates a clear-cut reduction in mortality of patients with strangulation obstruction since the advent of antibiotics.[9] However, most physicians agree that antibiotics are indicated.

Anastomosis of the large bowel provides the prime opportunity for spillage of noxious intestinal contents into the peritoneal cavity. Objective demonstration that intestinal antisepsis is of value was obtained experimentally in a study of large bowel anastomosis and devascularization of the distal side of the anastomosis.[10] By means of a plastic catheter threaded into the bowel and brought to the outside, it was possible to flood the lumen of the bowel with antibiotics, and thereby protect the bowel even under these rigorous conditions. While no clinician would purposely perform a colonic anastomosis with devascularized bowel, occasionally the procedure is done when the vasculature of the colon is not as good as one would like. Under these circumstances, the additional protection of antibiotics administered into the lumen of the bowel should be of considerable help. Indeed, clinical confirmation of this finding has been obtained by utilizing these techniques in a fairly large series of patients undergoing large bowel surgery.[11]

Improper surgical management of diseases of the large bowel may lead to peritonitis. Any undue leakage of the contents of the large bowel during a surgical procedure would lead to soiling of the peritoneal cavity. Similarly, treating complete obstruction of the left colon by a one-stage resection and anastomosis without proximal decompression is fraught with considerable danger. Once again, the experimental laboratory has been valuable.[12] Dogs subjected to large bowel obstruction for a week can be subjected to a colostomy with no mortality, whereas animals subjected to a primary anastomosis with or without antibiotics have a very high mortality.

Clinical Treatment

On the basis of this rather large and varied experimental background, the study was initiated of the intraperitoneal administration of kanamycin for clinical usage in patients suffering from any form of peritonitis or any undue soilage of the peritoneal cavity.[13-15] In the beginning, kanamycin was administered intraperitoneally only to

those patients who were moribund. The results were so remarkably good that within a relatively short time we extended our experience to other types of patients and have been gratified by rather remarkable results.

The dosage used (Table 1) has been employed in patients ranging from a few hours to over 90 years of age. Kanamycin has been placed in the peritoneal cavity of patients with a wide variety of problems, the most common one being perforated appendicitis. The patient list now includes almost every type of problem which can lead to undue soiling of the peritoneal cavity by elective, emergency, or traumatic means.

Table 1.—Intraperitoneal Kanamycin Dosage

Newborns	0.1 Gm.
One to three years	0.25-0.5 Gm.
Three to five years	0.5-1.0 Gm.
Adults	1.0-2.0 Gm.

Kanamycin has been used for all types of surgical diseases, given to patients in shock from a variety of causes, and receiving almost every form of anesthesia except the continuous intravenous administration of a muscle relaxant. The incidence of complications has been reduced over a comparable group of patients not treated with intraperitoneal antibiotics, and the mortality has decreased from what we would have anticipated in the same types of patients. Intraperitoneal administration of kanamycin has not eliminated all complications, and it was never anticipated that this would occur. It has seemed that the incidence of complications has been decreased. The charts of all the patients who died after the intraperitoneal use of kanamycin have been carefully reviewed by the Department of Surgery and the Department of Anesthesiology, and in no case has there been any evidence that the death could be traced to intraperitoneal administration.

Anesthetized Patient

For those who have some concern about the intraperitoneal administration of antibiotics in the anesthetized patient, there are two additional safeguards that can be utilized.

First, neostigmine is the specific antidote for the respiratory depression or apnea of neomycin. Only one bona fide case of respiratory depression has been reported following the intraperitoneal administration of kanamycin, but it is worthwhile to know that calcium chloride or calcium gluconate is the agent of choice to reverse this difficulty.

Second, an alternative method for handling the problem is to insert a small plastic catheter into the peritoneal cavity during the operative procedure, and to begin multiple instillations of antibiotic through this catheter as soon as the patient has recovered from anesthesia and has eliminated the possibility of an additive effect of the two agents.[15] In a series of 35 patients who received multiple instillations during a random study when 66 patients received a single instillation, there was a significant decrease in both the incidence of wound infections and intra-abdominal abscesses in the patients who received the multiple instillations. No local or systemic difficulties were noted with the multiple intraperitoneal administration of kanamycin.

It is important to stress that the overall needs of the patient who has peritonitis from whatever cause include: appropriate surgical therapy, proper management of fluid and electrolyte problems, adequate replacement and maintenance of blood volume, gastrointestinal intubation, intravenous support of caloric and other requirements, and a specific bacteriologic diagnosis whenever possible so that appropriate antibacterial therapy can be instituted. The desperately ill patient may need oxygen therapy or temperature lowering, or both.

Summary

Peritonitis is still a highly lethal disease.

Kanamycin and cephalothin can be administered intraperitoneally with safety.

In the experimental study of appendiceal peritonitis, it has been demonstrated that either kanamycin or cephalothin will significantly lower the mortality rate regardless of whether the drug is given at the time the appendiceal peritonitis is produced or at a later time interval.

In peritonitis which results from strangulation obstruction, antibiotics can reduce the mortality.

The lethal result of a faulty large bowel anastomosis can be prevented by intraluminal administration of antibiotics at the time of the colon anastomosis.

Improper use of antibiotics does not justify primary resection and anastomosis without proximal decompression in obstruction of the left colon.

Kanamycin has been administered intraperitoneally to a large group of patients with various

forms of peritonitis or peritoneal soiling, and has been shown to be most effective.

Appropriate surgical therapy in conjunction with the antibiotic management of patients with peritonitis has been emphasized.

References

1. Long, L. W.: Sulfanilamide Extraorally, Mississippi Doctor 18:156, 1940.
2. Cohn, I. Jr. and Beauclair, B. M.: Intraperitoneal Kanamycin. In: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, pp. 981-986.
3. Cohn, I. Jr. and Beauclair, B. M.: Intraperitoneal Antibiotic Administration, S. Forum 10:204, 1960.
4. Cotlar, A. M.; Massari, F. S., and Cohn, I. Jr.: Intraperitoneal Kanamycin in Treatment of Peritonitis, In: Antimicrobial Agents Annual-1960, New York, Plenum Press, Inc., 1961, pp. 386-391.
5. Cohn, I. Jr. and Cotlar, A. M.: Intraperitoneal Kanamycin. Ann. Surg. 155:532, 1962.
6. Crook, J. N.; Cotlar, A. M.; Bornside, G. H., and Cohn, I. Jr.: Intraperitoneal Cephalothin in Treatment of Experimental Appendiceal Peritonitis, Am. Surg. 34:736, 1968.
7. Cohn, I. Jr.: Strangulation Obstruction, Springfield, Ill., Charles C Thomas, 1961.
8. Thomas, M. A.; Heneghan, J. B.; Mathieu, F. J.; Stirling, C. T.; DiVincenti, F. C.; Weilbaecher, D. A.; Bornside, G. H., and Cohn, I. Jr.: Strangulation Obstruction in Germfree Dogs, Surgery 58:37, 1965.
9. Zollinger, R. M.; Kinsey, D. L., and Grant, G. N.: Intestinal Obstruction, Postgrad. Med. 33:165, 1963.
10. Cohn, I. Jr.; Langford, D., and Rives, J. D.: Antibiotic Support of Colon Anastomoses, Surg. Gynec. & Obst. 104:1, 1957.
11. Cohn, I. Jr.: Intestinal Antisepsis, Springfield, Ill., Charles C. Thomas, 1968.
12. Atik, M.; Castleberry, J. W.; Werner, J. C., and Cohn, I. Jr.: Experimental Study of Primary Anastomosis of Obstructed Colon, Surg. Gynec. & Obst. 110:697, 1960.
13. Cohn, I. Jr.: Intraperitoneal Antibiotic Administration, Surg. Gynec. & Obst. 114:309, 1962.
14. Cohn, I. Jr.: Kanamycin as an Intestinal Antiseptic and in Treatment of Peritonitis. Resume of Clinical Experience, Ann. N. Y. Acad. Sci. 132:860, 1966.
15. DiVincenti, F. C. and Cohn, I. Jr.: Intraperitoneal Kanamycin in Advanced Peritonitis. A Preliminary Report, Am. J. Surg. 111:147, 1966.

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editorial comment

ROBERT E. ZELLNER, M.D.

With the advances in anesthesia and surgical techniques, the increased knowledge of fluid and electrolyte balance, and the availability of blood and antibiotics that have occurred in recent years, peritonitis is no longer the dread and lethal disease that it was 50 years ago. Nevertheless, there is hardly any patient who gives the surgeon more concern than the one who is seriously ill with peritonitis. Dr. Cohn, in his interesting paper, has called attention to current thinking in the treatment of peritonitis with particular attention to the use of kanamycin and cephalothin.

Since his avowed purpose was to emphasize the superiority of kanamycin and cephalothin over other antibiotics as adjunctive treatment of peritonitis, his paper is largely devoted to this consideration. One might get the impression that the use of these antibiotics should be first consideration in the treatment of peritonitis; however, Dr. Cohn, very wisely in my opinion, in his first two paragraphs and again in his summary, gives emphasis to the cardinal principles of the treatment of this disease:

1. Anticipation and prevention.
2. *Adequate* drainage of abscess cavities.
3. Put the bowel at rest by enteric aspiration and/or diversionary stomas of the bowel.
4. Supportive treatment—blood, fluids, electrolytes, et cetera, and further, the proper administration of the proper antibiotic and adequate dosage.

The effectiveness of any antibiotic in the treatment of a severe infection depends on several factors:

1. The reaction of the host. The drug prepares the organism for eradication, but the host must mobilize adequate defense to overcome the infection, hence the importance of meticulous attention to the patient's general condition.

2. The timing of the administration of the drug. In the acute invasive stage of the infection the proper antibiotic will likely cure. In the chronic suppurative stage with deep-seated cellulitis, no antibiotic is likely to cure. Only adequate drainage of all abscess cavities can do this.

3. The proper antibiotic. Dr. Cohn has demonstrated the superiority of kanamycin and cephalothin, especially when used intraperitoneally and intraluminally in the treatment of peritonitis. The everchanging picture of bacterial resistance to drugs makes this a matter which should be kept under constant study for the time when the effectiveness of these drugs may become suspect.

Dr. Cohn does us a service in calling attention to a fact that should be a homily: Antibiotics are no substitute for good surgical judgment or good surgical technique. His paper should be of value to anyone interested in abdominal surgery.

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Exotic Infections as Seen in Travelers

Elizabeth Barrett-Connor, M.D.

Travel outside the continental United States is increasing, and more and more North Americans have joined the jet set. Some of these travelers acquire diseases which are either exotic or appear in unfamiliar or vicious forms. Most relevant diseases are infectious, easy to diagnose and can be successfully treated, if the doctor thinks of them. Every physician should add a geographical history to the usual social, family and clinical history, and should be aware of the major global distribution of diseases.

About half the time "where have you been" plus the patient's signs and symptoms will put the physician on the right track. Fortunately, common diseases are still common. A Peace Corps volunteer with jaundice and tender hepatomegaly is more likely to have hepatitis than Chinese liver fluke, leptospirosis, schistomiasis, or other exotic diseases acquired in foreign lands. The most common cause of fever in someone who has been to a malarious area on inadequate chemoprophylaxis is still malaria. Most patients who have had a short if harrowing bout of diarrhea during a brief sojourn in another country will not have acquired intestinal parasites, salmonella or worse, but will have had tourist diarrhea (turista) about which much has been written and little is known. Reassurance and not antibiotics or antiamebics are in order.[1]

The real problem of exotic diseases in travelers occurs in the other 50% of patients who have no obvious diagnosis, and whose "where have you been" does not ring any bells. Such patients generally fall into three groups: (1) fever, (2) diarrhea and (3) eosinophilia.

Fever of Unknown Origin

The problem of fever of unknown origin in a patient who has traveled outside the continental United States is similar to that in a patient without travel history. In both instances the history and physical examination are most likely to be helpful. Laboratory studies should serve to confirm suspicions and not represent a random search for etiology. A travel history does not exclude the possibility that the patient has a disease unrelated to his travel. Tuberculosis, endocarditis, malignancy, and others are not prevented by recent foreign travel. Certain types of travel history may be important in suggesting diseases which also occur in this country but appear more commonly manifest in those who have traveled or lived outside the northern hemisphere. Thus, while amebiasis can be acquired anywhere in the world, amebic liver abscess seems to be more frequent in those who have lived in other endemic areas than the United States. Tuberculosis is still present in this country, but life among the natives in underdeveloped countries increases the risk of exposure to active unrecognized disease. Sporadic brucellosis occurs in the United States, particularly in high risk occupational groups such as abattoir workers and veterinarians, but a recent trip to Spain would suggest this diagnosis sooner than no travel history in a patient without occupational risk. Travel to tropical areas with poor sanitation raises the risk of typhoid but typhoid can result from exposure to a carrier in any country, as demonstrated by the recent outbreak in a charming little Swiss skiing village.[2]

Two so-called exotic diseases which cause puzzling fevers deserve special mention because of widespread misconceptions about them. Travel to any country where malaria exists should alert the physician to this diagnosis. Every-other-day or every-third-day fever is very suggestive when present but is a typical phenomenon only in patients with some acquired immunity. Early disease in nonimmune patients may show almost any type of fever curve including sustained alarming elevations over 105 F. A history that the patient was taking a malaria pill does not exclude this

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diagnosis. It is important to ascertain that the chemoprophylactic agent was taken for a sufficient period of time after return to the United States, and that the country visited has malarial strains sensitive to this drug. Vivax malaria can appear clinically 2-3 years after leaving an endemic area, even after the usual chemoprophylaxis. Quartan malaria can apparently persist in latent form for life, only to be activated by some stress such as childbirth or surgery. Appropriate microscopic study of thin and thick blood films will diagnose quartan or vivax malaria in every patient clinically ill with this disease, and in over 90% of patients ill with falciparum malaria. Empirical treatment with chloroquine, quinine, and other drugs for "malarial fever" without definitive diagnosis should be limited only to those rare patients who appear critically ill and have returned from a malarious area within two years (usually six months) and are, therefore, suspected of having falciparum malaria. Falciparum malaria is one of the few true medical emergencies; the patient can die or reach an irreversible disease state within 24 hours of the onset of symptoms.

Misconceptions about amebic liver abscess also abound. Fever, anemia and leukocytosis are seen in almost all patients with a clinical illness due to liver abscess of over a week's duration. Hepatomegaly is, however, by no means universal; the right lobe of the liver is often elevated primarily upwards, which will be missed without careful physical examination and attention to the appearance of the right diaphragm on chest x-ray. Five to 10 per cent of abscesses are in the left lobe of the liver where often no bedside or radiographic technique points to liver disease. Liver function tests including alkaline phosphatase are frequently normal despite a massive liver abscess. Stools for E. histolytica are negative in up to one half the cases. Finally, the interval between the most probable acquisition of amebiasis and the appearance of a liver abscess may be 15 years or longer. Even a therapeutic response to the most effective antiamebic agents may be absent in some patients who ultimately require surgical drainage. This diagnostic dilemma is reflected by the figures of the Registrar General in the United Kingdom, where amebiasis causes more deaths than malaria, although imported malaria is twice as frequent.[3]

A third cause of perplexing fever, although rare, deserves mention because it is treatable and otherwise frequently fatal. Meliodosis, infection with the bacillus Pseudomonas pseudomallei, is largely limited to Southeast Asia and Australia; a number of cases acquired in Vietnam have drawn recent attention to this disease. An acute fulminant form, leading rapidly to death, may present either primarily as a pneumonic process mimicking tuberculosis with upper lobe cavitation, or as choleraic diarrhea. Chronic meliodosis may occur with or without antecedent acute illness and is characterized by multiple draining sinuses, abscesses or osteomyelitis. Sputum, blood or bone marrow cultures are usually diagnostic, while empirical therapy with penicillin and streptomycin is ineffective.[4]

An analysis of other causes of fever of unknown origin in American soldiers serving in Vietnam includes such diverse diseases as chickunguna and dengue fever, leptospirosis, scrub typhus and Japanese B encephalitis.[5] The military involvement in Southeast Asia has alerted the United States medical profession to potential medical problems in this area;[6] travelers to other parts of the world who acquire exotic disease may not be so fortunate. For example, both kala azar and vesical schistosomiasis may present as perplexing fever many months after leaving the endemic area, and have not received attention related to U. S. military ventures.

Diarrhea

A second common way for a traveler to present to his physician is with diarrhea. At least one third of young adults who travel to foreign soils acquire transient diarrhea of one to six days' duration, with or without fever and other gastrointestinal complaints, for which no obvious etiology is forthcoming (Delhi belly, Montezuma's revenge, Aztec two-step). Turista diarrhea usually appears within 3-14 days after arrival and is not to be confused with the 24-hour diarrhea which may immediately follow long air flights and is presumably related to a series of rapid transitions between ground level pressure and high altitudes.[7] Turista is self-limited and appears to be prevented to some degree by prophylactic use of non-absorbable broad spectrum antibiotics. There is little to recommend any form of antibacterial treatment once it has begun —by the time the victim can leave the nearest bathroom long enough to get to the pharmacy his illness is already resolving. Americans returning home after spending more than two weeks in another country, or aliens who visit this country, often describe a similar illness on arrival here.[1]

When the diarrhea is of more than one week's duration, however, an exotic disease must be suspected. Diarrhea may be an initial manifestation

of almost every intestinal parasite as well as malaria, schistosomiasis, shigellosis, salmonellosis and cholera. Stools for ova and parasites and culture for enteric pathogens obtained prior to any therapy should resolve this dilemma. If, for example, a broad spectrum antibiotic is given for presumed salmonellosis, amebic diarrhea may transiently resolve, stool cultures subsequently be negative, and the antibiotic preclude the correct diagnosis. Intestinal amebiasis can be cured by many broad spectrum antibiotics, but the confusing picture of amebic liver abscess can still evolve at a later date. Thus, definitive diagnosis is of more than academic importance. Examination of six diarrheal stools or three formed and one purged stool should establish or eliminate the diagnosis of intestinal amebiasis in virtually every patient who has not had the diagnosis obscured by antibiotics, barium or mineral oil.[8] A final judgment is particularly important when treating the North American or European traveler who often suffers greater danger from fear of amebic dysentery than the disease itself. Self-medication with colonic irritants then perpetuates functional diarrhea and bowel neurosis may result.[7]

Bloody diarrhea (dysentery) may suggest amebiasis, malaria, shigellosis or schistosomiasis, but it is well to remember that at least half of patients with diarrhea due to one of these agents do not have dysentery. The major importance of bloody diarrhea is that it excludes the diagnosis of turista diarrhea. Fever is common to most of these diarrheas. The absence of fever is more compatible with amebiasis or cholera.

Patients with steatorrhea are also afebrile. Tropical sprue is usually limited to travelers who have resided for several months in the endemic area; the etiology is unknown. The condition is rare in travelers to Africa although not uncommon during or following stays in India, the Far East, and parts of Central and South America. Although one tends to associate tropical sprue with steatorrhea and megaloblastic anemia, neither finding may be striking. Megaloblastic anemia appears to be more characteristic of Western Hemisphere tropical sprue; its absence in former residents outside this hemisphere does not exclude the diagnosis. Stools in tropical sprue are often watery and neither foul nor grossly fatty, although increased fat will be noted on direct examination. Small bowel biopsy and the response to tetracyclines and/or folic acid are required for diagnosis. Heavy infection of the small intestine with Giardia lamblia or Strongyloides stercoralis must also be considered in the differential diagnosis of steatorrhea of travelers.

Eosinophilia

A third common problem seen in travelers is eosinophilia. After exclusion by history of nontropical causes such as asthma, drug allergy or tobacco smoking, the most common cause of low-grade eosinophilia (less than 20% of a normal white blood count) is intestinal helminths. Examination of stools may reveal hookworm, Strongyloides, Trichostrongylus, Ascaris or Trichuris. Any of these worms in low numbers may cause absolutely no symptoms and be first suspected because of eosinophilia. Certain symptoms associated with eosinophilia may predict the worm, i.e., iron deficiency anemia with hookworm, duodenal ulcer pain with hookworm or strongyloidiasis, intestinal obstruction with ascariasis, rectal prolapse with trichuriasis. Many of these worms are found together and it is not possible to attribute eosinophilia to a given parasite. Eradication of the worm with loss of eosinophilia confirms the association, but eradication of intestinal nematodes in asymptomatic adults is probably unnecessary except in ascariasis (because of the potential for migration) and in strongyloidiasis (because autoinfection can result in heavy parasitism and disease, vide infra).

Modest eosinophilia is also seen with otherwise asymptomatic infection with schistosomes, flukes and microfilaria. With a history of travel to endemic areas, appropriate examination of stool, urine, rectal biopsy, blood or tissue is indicated. It is important to remember that one-cell parasites such as the amebas, malaria, Giardia, and others do not cause or explain eosinophilia.

Marked eosinophilia, often greater than 50% of an elevated white blood count, is usually seen only with certain systemic parasitoses, which are rarely asymptomatic. Trichinosis and visceral larva migrans are usually suggested by the clinical picture and confirmed by biopsy or serologic test. A massive infection with exogenously acquired ascariasis or endogenous autoinfection of strongyloidiasis may result in striking eosinophilia usually at the time of pulmonary larval migration. Urticaria, rashes, wheezes and fever suggest an allergic reaction. Stool examination may be negative until the maturation of egg-laying adult ascarids or if strongyloid autoinfection is complete in the lower colon. Examination of bloody sputum, duodenal aspirates or a purged stool may be required for diagnosis.

Exotic Causes of Signs and Symptoms

Finally there is the previously well patient who presents with a new symptom complex and the question of the role of travel in the etiology of the present illness is raised. Some symptoms are definitely unusual manifestations of unusual diseases; however, insofar as they are treatable they are worthy of note. Others, although exotic to the North American physician, are actually common clinical syndromes in their endemic area. For example, cysticercosis is the single, most common cause of epilepsy in some endemic areas, and British military experience showed that only a short exposure was necessary to acquire this manifestation of Taenia solium infection. In other parts of the world hydatid cysts are the most common cause of hepatomegaly and schistosomiasis the most common cause of hematuria. Paragonimiasis is the most common cause of hemoptysis in the world.

Table 1 lists a variety of neurologic syndromes which can be simulated by exotic diseases. At least two can prove rapidly fatal in the absence of specific therapy. While malaria and Vietnam should by now be firmly linked in the minds of clinicians, deaths from cerebral malaria in returned veterans have occurred. Imported African sleeping sickness is unusual in this country; consequently patients with trypanosomiasis have been mistakenly treated for tuberculous meningitis, hospitalized for mental illness, and operated on for brain tumor. Poliomyelitis is still endemic in many underdeveloped countries although the early age of infection masks its incidence in the native population. Any non-immune traveler should be immunized prior to leaving the United States.

Most pulmonary disease in persons from outside the United States is similar to that seen in non-travelers, e.g., bacterial or viral pneumonia and cancer. Both plague and anthrax are rare causes of acute and fatal pneumonia of travelers. Upper lobe disease, particularly when cavitary, should suggest tuberculosis or meliodosis. Although histoplasmosis can be acquired anywhere, a number of recent acute pulmonary problems have occurred in travelers to Central and South America, particularly those whose occupation or fancy takes them into caves. A diffuse pneumonia, often with the appearance of miliary tuberculosis, plus eosinophilia, should suggest strongyloidiasis or ascariasis, and, as noted, the stool examination may be negative at this stage of infection. Tropical pulmonary eosinophilia is associated with nocturnal non-productive cough, fever and weight loss, and almost any roentgenographic picture; at least some of these cases are microfilarial in origin and respond to diethycarbamizine. Hepatic amebiasis may be less impressive than the associated pulmonary findings of sympathetic or exudative effusion, right lower or right middle lobe pneumonia or atelectasis. Finally, paragonimiasis may cause almost any type of pulmonary picture; pleuritic chest pain, blood-flecked sputum and an appropriate travel history should lead to sputum examination for detection of the parasite.

The exotic causes of heart disease have been the subject of an entire book.[9] Aside from myocarditis associated with viral, bacterial or rickettsial infection, West African trypanosomiasis, acute Chagas' disease, and trichinosis, more chronic types of heart disease may also ensue (Table 2).

Primary disease of the reticuloendothelial system, manifested as splenomegaly, hepatomegaly, or

Table 1.—Neurologic Problems of Exotic Etiology

Aseptic Meningitis	
	Viral encephalitis, especially ARBO viruses
	Tuberculous meningitis
	Trypanosomiasis
	Chagas' disease (in children)
	Tick-borne relapsing fever
	Rickettsial diseases
	Leptospirosis
Peripheral Neuropathy	
	Beri beri
	Post-diphtheria
	Post-relapsing fever
	Post-shigellosis
	Tick paralysis
Transverse Myelitis	
	Schistosomiasis (mansoni)
	Loiasis
Convulsions	
	Cysticercosis
	Schistosomiasis (japonicum)
	Paragonimiasis
Progressive Coma (may simulate brain tumor or tuberculous meningitis)	
	Trypanosomiasis
	Cerebral malaria
	Viral encephalitis

Table 2.—Exotic Causes of Heart Diseases

Amebic pericarditis
Chagas' disease
Trypanosomiasis (T. rhodesiense)
Toxoplasmosis
Echinococcosis
Trichinosis
Beri beri
Myocarditis (viral, rickettsial, typhoid, diphtheria)

Table 3.—Exotic Causes of Lymphadenopathy

Wucherian and Brugian filariasis*	Tuberculosis
Plague*	Toxoplasmosis
Typhus	Rat bite fever*
Chagas' disease*	Onchocercosis
African trypanosomiasis	East African kala azar
Glanders*	Lymphogranuloma venereum*

Exotic Causes of Splenomegaly

Kala azar	Plague
Brucellosis	Relapsing fever
Typhoid	Toxoplasmosis
Malaria	Visceral larva migrans
Schistosomiasis	

Exotic Causes of Liver Disease

Yellow fever	Malaria
Leptospirosis	Kala azar
Relapsing fever	Schistosomiasis
Amebic liver abscess	Paragonimiasis
Hydatid cyst	Visceral larva migrans
Liver flukes	Veno-occlusive disease

*Often unilateral and localized

Table 4.—Exotic Causes of Cutaneous Disease

Rash

Smallpox
Relapsing fever
Yellow fever
Plague
Rickettsial diseases
Dengue and related viral infections
Hemorrhagic fevers
Rat bite fever
Leptospirosis

Skin Ulcer or Eschar

Tropical ulcer (fusospirochetal)
Cutaneous leishmaniasis
Atypical mycobacterium
Cutaneous diphtheria
Anthrax
Rickettsial diseases
Rat bite fever
Meliodosis
Fungal infection
Glanders
Yaws
Dracunculosis

Skin Nodules

Onchocercosis
Sparganosis
Bartonellosis
Cysticercosis
Yaws

lymphadenopathy, in any combination, is noted in Table 3. Jaundice is a rare or late manifestation of most exotic liver disease. Anicteric hepatomegaly suggests amebic liver abscess, hydatid cyst of the liver, cirrhosis, brucellosis or kala azar. Despite its name, jaundice is minimal and hepatomegaly often absent in yellow fever. Two causes of generalized lymphadenopathy, often with rash and fever, deserve special mention; both toxoplasmosis and secondary syphilis can be acquired during a swinging weekend in Paris. The relatively high incidence of acquired toxoplasmosis in France has been attributed to the ingestion of undercooked meat in gourmet restaurants.

Cutaneous manifestations of tropical disease are multiple (Table 4). Almost all exotic diseases which cause a rash, except Korean hemorrhagic fever, have a usual incubation period of less than 14 days. This is helpful in the differential diagnosis of other skin diseases which appear later following travel. Most skin ulcers will prove to be chronically infected insect bites, which respond well to topical antibiotics and pressure dressings. Appropriate smears and cultures for leishmaniasis and atypical mycobacteria are indicated for indo-

lent skin ulcers refractory to therapy. While diagnoses usually are suggested by the total clinical picture, the disease pattern may differ from that seen in this country; thus tick typhus acquired outside the United States may present as an eschar but no rash in a confused febrile patient.

Anemia in a traveler raises several exotic possibilities. In addition to the hemolytic anemia of malaria, bartonellosis and that associated with certain antimalarials in persons with glucose-6-phosphate dehydrogenase deficiency, a number of exotic diseases cause hypersplenism and anemia. Iron deficiency anemia results whenever the hookworm load is greater than the oral iron intake. A small percentage of patients infected with Dibothriocephalus latus develop megaloblastic anemia. This is apparently due to competition with the parasite for vitamin B_{12}. Megaloblastic anemia, as mentioned, may also overshadow other features of tropical sprue.

Psychiatric illness is worldwide although the more pressing needs of many underdeveloped countries, where the life expectancy averages 35 years, has tended to obscure the importance of mental illness. Over 40% of psychiatric morbidity in the tropics is secondary to nutritional, infective or endemic diseases.[10] Some of these diseases can be acquired by travelers. Others, especially those with peculiar distribution and as yet uncertain etiology such as Kuru and Jamaican paralysis, are apparently only seen in the native population. Acute psychiatric illness may occur during or following travel. Rapid transportation to areas with strange climate, culture and language tends to produce a sense of isolation in some travelers which may result in panic and a disorganization of behavior. Parasite neurosis is a more chronic reflection of an unstable personality reaction to travel.

Education of the public would be best served by disease prevention. Simple precautions such as boiling suspect water and milk, avoiding unpeeled fresh vegetables and fruits, minimizing insect exposure, chemoprophylaxis and immunizations should be discussed with the traveler. A pamphlet, Health Hints for the Tropics,[11] is available from the American Society of Tropical Medicine and Hygiene and should be in every physician's office.

References

1. Kean, B. H.: Diarrhea of Travelers to Mexico, Ann. Int. Med. 59:605-614 (Nov.) 1963.
2. Typhoid at Zermatt, Editorial, New Eng. J. Med. 268:1019-1020 (May), 1962.
3. Stamm, W. P.: Peripatetic Patients and Pathologists, J. Clin. Path. 20:112-116 (Mar.) 1967.
4. Cooper, E. B.: Melioidosis, J.A.M.A. 200:452-453 (May 8) 1967.
5. Deller, J. J., Jr. and Russell, P. K., Analysis of Fevers of Unknown Origin in American Soldiers in Vietnam, Ann. Int. Med. 66:1129-1143 (June), 1967.
6. Gilbert, D. N.; Moore, W. L., Jr.: Hedberg, C. L., and Sanford, J. P.: Potential Medical Problems in Personnel Returning from Vietnam, Ann. Int. Med. 68:662-678 (Mar.) 1968.
7. Walters, J. H.: Dysentery and Modern Travel, World Med. J. 12:184-185, (Nov-Dec.) 1965.
8. Barrett-Connor, E.: Amebiasis, New Eng. J. Med. 276:528 (Mar. 2) 1967.
9. Kean, B. H. and Breslau, R. C.: Parasites of the Human Heart, Grune and Stratton, New York, 1964.
10. Lambo, T. A.: Psychiatry in the Tropics, Lancet 2:1119-1121, (Nov. 27) 1965.
11. Health Hints for the Tropics, Most, H. Ed., Amer. Soc. Trop. Med. Hyg. Bethesda, 1967.

Dr. Barrett-Connor, P.O. Box 875, Biscayne Annex, Miami 33152.

Questions and Answers

Infections in Travelers Presentation

QUESTION

Is there anything that individuals should take to prevent the occurrence of turista?

ELIZABETH BARRETT-CONNOR, M.D.

I think if the traveler, especially a young person, is going to be in a high risk area for less than three weeks, then the chances of a three day illness, which will have a major effect on vacation or business plans, is great enough to warrant prophylaxis. Neomycin or a non-absorbable sulfa taken daily for the duration of the visit would reduce the incidence of disease up to 70%. I don't think that one can recommend this type of prophylaxis for more than three weeks, and I feel that a possible three day illness out of a longer stay is less devastating, therefore I do not recommend anything for these travelers.

JAY P. SANFORD, M.D.

What is turista, really? This is a great mystery. Sure, there's a little shigellosis and some salmonellosis, but turista to me is a non-bacterial kind of curse of the Aztecs or the Incas, depending upon whether you get it in Mexico or in Peru. What is turista?

DR. BARRETT-CONNOR

The turista to which I am referring is that reviewed by Ben Kean in the Annals of Internal Medicine, 1963. These studies were done primarily in Mexico and we were unable to demonstrate shigella, salmonella or parasites in 99% of young Americans with diarrhea. We were able to show a reduced incidence of diarrhea in double blind drug studies. This latter finding suggests a bacterial etiology, but what it is, or whether it is the same disease in India as in South America, for example, I don't know.

MARVIN L. MEITUS, M.D.

I wonder if I might comment on this. We have many people who go from this area to Mexico, and somewhere it filtered through that the water used in Mexico has a high content of magnesium sulphate, which is the same as citrate magnesia. When individuals eat salads in Mexico City and in Mexico, the magnesium sulphate left on the fresh fruits and fresh vegetables acts upon the individual as a cathartic and they subsequently develop turista which, in reality, is not a bacterial gastroenteritis, but secondary to the magnesium sulphate content of the water.

DR. BARRETT-CONNOR

I've heard that too, but I don't understand why taking a non-absorbable antibacterial drug would reduce the incidence and severity of a non-bacterial disease. However, in our bacterial studies we were unable to demonstrate any accepted pathogens. Here are two divergent pieces of information, and I don't know what to do with them.

QUESTION

I would like to ask Dr. Barrett-Connor if she would comment on the suggestion that's been made that enteropathic Escherichia coli in adults may play a role in this process.

DR. BARRETT-CONNOR

We did look for enteropathogenic E. coli, perhaps by not the most ideal bacteriologic techniques, and were unsuccessful. I think that is still an open question.

QUESTION

Would you comment on Entero-Vioform, which is one of the compounds that I think is very commonly used.

DR. BARRETT-CONNOR

As I remember, there were more people taking Entero-Vioform who developed diarrhea than in the placebo group. I think this drug received its undeserved reputation because it is inexpensive and readily acquired from any Mexican pharmacy without prescription. By the time the victim is well enough to keep the pills down or stagger to the drugstore, he is already 6-12 hours away from recovery, but the drug gets the credit.

DR. SANFORD

I think along these same lines. Several years ago I had the good fortune of being volunteered by my wife to go with a group of 225 swimmers, ages 10 to 18, to Mexico City. The first time we went, there was no prophylaxis and the second time there was. The first trip we had 175 of these individuals with whatever this illness was. The second time, on prophylaxis, we had a very low frequency of illness. It was not a double blind study, but one certainly got certain prejudices out of it.

QUESTION

Is there any immunity established after an attack of turista? I have never heard of anyone having it twice in a row.

DR. BARRETT-CONNOR

Based on a series of one, there is no immunity. I think after you have been there for a while, you're unlikely to get it during that stay, but having returned home and then gone back, all bets are off. One of the things that impressed me visiting friends in places where they have perfectly enormous problems with this, is that you go over to their house for dinner and you find that half the family is down with turista, depite the fact that they have lived there for years. It is an endemic disease problem.

QUESTION

Could turista be staphylococcal food poisoning?

DR. BARRETT-CONNOR

It is not a typical clinical picture—vomiting and prostration are less common with turista than with staphylococcal food poisoning. Also the apparent prevention by antibacterial agents militates against a disease due to preformed toxin. However, the definitive study, with inoculation of kittens in a search for staphylococcal toxin, has not been done, so this possibility has not been excluded.

QUESTION

Dr. Connor, would you reiterate what you said about not treating routine parasitosis, particularly in children?

DR. BARRETT-CONNOR

What I meant to say was that most adults who acquire intestinal worms outside the United States are not likely to be re-exposed to them in this country, are not symptomatic, and do not require treatment. They will get rid of the worms by themselves. I'm talking about the soldier, for instance, who gets hookworm in Vietnam and then comes back and may have a really incredible amount of treatment trying to get every last hookworm out. That, I think, is a mistake. Children who are symptomatic or who acquire parasites in this country, or are at risk of massive infection, merit treatment.

DR. SANFORD

I think this is an important point to make. In a group of asymptomatic volunteers that we studied upon return from Vietnam, some 12 to 15% actually had hookworm and, with the exception of one of these individuals who had anemia, the rest were totally asymptomatic. To treat with tetrachloroethylene you may have to go to the feed store and buy it in either dog size or puppy size capsules. You can't even buy it as a human pharmaceutical agent and to subject people to this for hookworm, certainly is not justified in most cases.

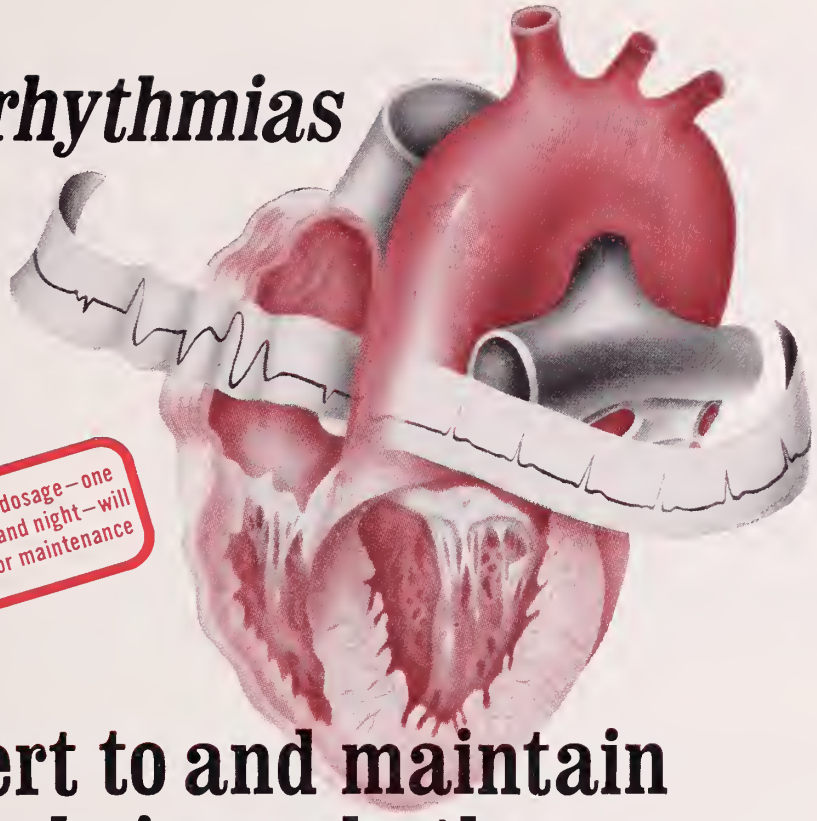
QUESTION

Would you comment on the efficacy of Mintezol and its toxicity?

DR. BARRETT-CONNOR

Mintezol, which is thiabendazole, is the drug of choice for strongyloidiasis, trichuriasis and cutaneous larva migrans. It also has questionable activity against such diseases as trichomoniasis and visceral larva migrans. It is a broad spectrum antihelminthic and will reduce the infection with hookworm, pinworm and Ascaris, but is not the drug of choice for these parasites. □

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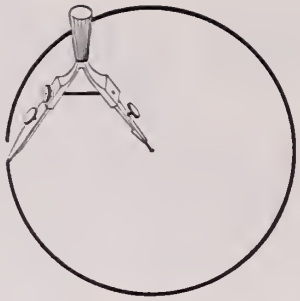
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Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

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Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

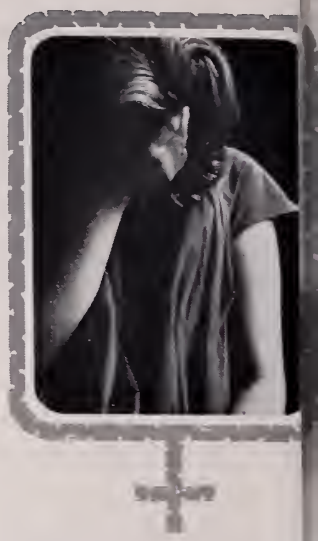
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Dosage and Administration: See above.

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URISED. This is not a dramatic "wonder drug"
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URISED rapidly exerts spasmolytic action, rel
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burning on urination. Rapid acting URISED ex
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medium.

URISED is safe . . . especially useful in long-te
management of chronic cases; as a prophyla
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have been reported.

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Each blue-coated tablet contains active:

Atropine Sulfate	0.03 mg.	Methylene Blue	5.4 g
Hyoscyamine	0.03 mg.	Phenyl Salicylate	18.1 g
Methenamine	40.8 mg.	Benzoic Acid	4.5 g

PRECAUTIONS: Administer with caution to persons w
known idiosyncrasy to atropine or cardiac disease. Wh
under this therapy the urine is blue; patients should be
advised to allay apprehension.

SIDE EFFECTS: Neither irritation nor other untoward
actions have been reported; however, if pronounced dryn
of the mouth, flushing, or difficulty in initiating micturit
occur, decrease dosage. If rapid pulse, dizziness, or blurr
of vision occur, discontinue use immediately. Acute urin
retention may be precipitated in prostatic hypertrophy.

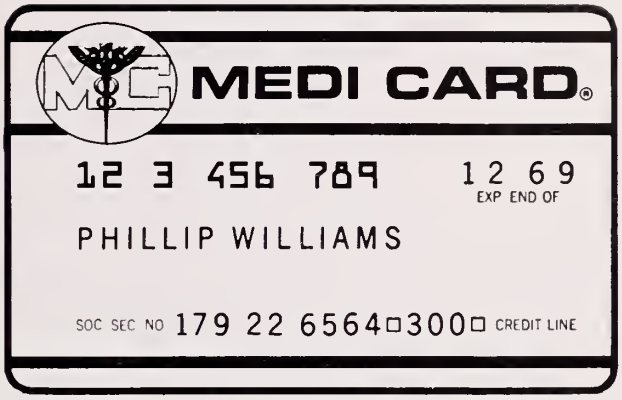
CONTRAINDICATIONS: Glaucoma, urinary bladder neck
pyloric obstruction, duodenal obstruction and cardiospas
Hypersensitivity to any of the ingredients.

DOSAGE: Adults—Two tablets, orally, four times per d
followed by liberal fluid intake. Acute cases—Initially t
tablets every hour for three doses followed by the recc
mended daily administration. Children—One-half the ad
dose.

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Each tablet contains ethynodiol diacetate 1 mg., mestronol 0.1 mg.



The new mother needs time . . .
to adjust to motherhood,
to give her new baby all the love
and attention he requires.
She needs time for her husband . . .
and for herself as well . . .
so that she can come to terms
with the increased cares
and responsibilities now facing her.
She needs time to decide
when she will have additional children
and how many she will have.

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Each tablet contains ethynodiol diacetate 1 mg., mestranol 0.1 mg.

GIVES HER TIME

Your prescription for Ovulen-21 gives the new mother time to meet her family's present needs...to plan for her family's future.

She can take Ovulen-21 confidently and comfortably month after month. Its dependability is enhanced by its simplicity of use. A woman needs little or no time to learn the simple Ovulen-21 regimen: three weeks on—one week off. And the automatic record-keeping of the petite, virtually "patient-proof" Ovulen-21 Compack® helps to maintain her schedule...helps put time on her side.

Immediately post partum is the time

It is the time when motivation is highest—when a new mother needs expert advice for the future, so she can space her children and limit her family.

It is also the most opportune time, since she is conveniently present in the hospital, for her to be given both instructions and a prescription.

Non-nursing mothers may begin Ovulen-21 immediately after delivery, on the day of departure from the hospital or at the first postpartum visit, as desired. It is recommended that nursing mothers begin Ovulen-21 four weeks after delivery.

A small fraction of the hormonal agents in oral contraceptive pills has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Indication—Oral contraception.

Contraindications—Thrombaphlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinama af the breast, known ar suspected estragen-dependent neaplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch far the earliest manifestations of thrombatic disorders (thrambaphlebitis, cerebrovascular disarders, pulmanary embalism, retinal thrombosis); if present ar suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfald increase in mortality ond morbidity due to thromboembolic diseases in wamen toking oral cantraceptives. In these controlled retrospective studies, involving 36 reported deoths and 58 hospitalizations due ta "idiapathic" thromboembalism, statistical evaluatian indicated that the differences observed between users and nan-users were highly significant. The canclusions reached in the studies are summarized in the table below:

Camparison of Martality and Hospitalizatian Rates Due to Thrambaembolic Disease in Users and Nan-Users af Oral Cantraceptives in Britain.

Categary	Martality Rates		Haspitalizatian Rates (Marbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Cantraceptives	1.5/100,000	3.9/100,000	47/100,000
Nan-Users	0.2/100,000	0.5/100,000	5/100,000

No camparable studies ore yet avoilable in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannat be applied directly to wamen in other countries in which the incidences af spontaneously occurring thramboembolic disease may differ.

Discantinue medicatian pending examination if there is sudden partial or camplete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vasculor lesians are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the passibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The lang-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts ond pelvic argans, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnarmal be repeated after the drug has been withdrawn far two months.

Pre-existing uterine fibromyamas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may couse some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardioc or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctianal causes. Adequate diagnostic measures are indicated in undiagnased vaginal bleeding.

Carefully observe patients with a history of psychic depression and discantinue the drug if severe depression recurs.

Any possible influence of prolanged Ovulen therapy on pituitary, avarion, adrenal, hepatic or uterine functian awaits further study.

A decrease in glucose tolerance has occurred in o significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. Far this reasan, diabetic patients should be abserved carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in wham bone growth is not camplete.

The age af the potient constitutes no absolute limiting factar, although Ovulen therapy may mask the onset of the climacteric.

The pathalogist should be infarmed of Ovulen therapy when relevant specimens ore submitted.

Adverse Reactians—A statistically significant assaciation has been shown between use af oral contraceptives and the following seriaus adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relatianship has been neither confirmed nor refuted far the following seriaus adverse reactians: cerebravascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The fallowing adverse reactions are known to occur in patients receiving aral contraceptives: nausea, vomiting, gastrointestinal symptams (such as abdominal cramps and blaating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melosmo, breast changes (tenderness, enlargement, secretian), change in weight, changes in cervical erosion and cervical secretions, suppression of lactatian when given immediately past partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactians have been reparted in users of oral contraceptives, an assaciation has been neither confirmed nor refuted: anovulation past treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemarrhagic eruptian, itching. The following labaratory results may be altered by aral contraceptives: hepatic functian: increased sulfabramophthalein and other tests; coagulation tests: increase in prathrambin, Factars VII, VIII, IX and X; thyraid function: increase in PBI and butanol extractable protein bound iadine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determinatian.



References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

Before prescribing see complete prescribing information.

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an antibiotic you can use without risk to the kidney

Polycillin-N

(sodium ampicillin)

the penicillin you use like a broad-spectrum antibiotic

PRESCRIBING INFORMATION. 11—1/2/69. For complete information consult Official Package Circular.

Indications: Infections due to susceptible strains of Gram-negative bacteria (including Shigellae, *S. typhosa* and other Salmonellae, *E. coli, H. influenzae, P. mirabilis, N. gonorrhoeae* and *N. meningitidis*) and Gram-positive bacteria (including streptococci, pneumococci and nonpenicillinase-producing staphylococci).

Contraindications: A history of allergic reactions to penicillins or cephalosporins and infections due to penicillinase-producing organisms.

Precautions: Typical penicillin-allergic reactions may occur, especially in hypersensitive patients. Mycotic or bacterial superinfections may occur. Experience in newborn and premature infants is limited and caution should be used in treatment, with frequent organ function evaluations. Safety for use in pregnancy is not established. In gonorrheal therapy, serologic tests for syphilis should be performed initially and monthly for 4 months. Assess renal, hepatic and hematopoietic function intermittently during long-term therapy.

Adverse Reactions: Skin rash, pruritus, urticaria, nausea, vomiting, diarrhea and anaphylactic reactions. Mild transient elevations of SGOT or SGPT have been noted. Black tongue has been noted in some patients receiving the Chewable Tablets.

Usual Dosage: Adults—250 or 500 mg. q. 6 h. (according to infection site and offending organisms). Children—50-100 mg./Kg./day in 3 to 4 divided doses (depending on infection site and offending organisms). Bacterial meningitis—150-200 mg./Kg./day in 6 to 8 divided doses. Children weighing more than 20 Kg. should be given an adult dose when prescribing orally. In parenteral administration, children weighing more than 40 Kg. should be given an adult dose. Beta-hemolytic streptococcal infections should be treated for at least 10 days.

Supplied: Capsules—250 mg. in bottles of 24 and 100. 500 mg. in bottles of 16 and 100. For Oral Suspension—125 mg./5 ml. in 60, 80 and 150 ml. bottles. 250 mg./5 ml. in 80 and 150 ml. bottles. Chewable Tablets—125 mg. in bottles of 40. Injectable—for I.M./I.V. use—vials of 125 mg., 250 mg., 500 mg., and 1 Gm. Pediatric Drops—100 mg./ml. in 20 ml. bottles.

A.H.F.S. Category 8:12.16

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Florida Medical | editorial

From the Editor

Franz Stewart

Gregarious Man

None of us really expected to find men on the moon nor evidence of life on Mars, yet there is a widespread, unexpressed disappointment. Those funny little men with teardrop tummies and pointed heads are somehow necessary to us. Seeing pictures of Mars and not finding them sends us searching further.

After all, hydrocarbons are found on the moon, and who knows, there still may be some form of life on Mars! Then there are all the other planets and stars, and it is absurd to think that Earth is the only place to find life.

We must not be alone! This home of ours, with no companions anywhere else! This is unacceptable. They may find us if we can't find them. If they come with guns, germs or superior intelligence and kindness, it doesn't matter. It is unthinkable there are no others!

Objectivity

Ask a question, study the data related to it. Design an experiment to answer a part of the question and define the limits or framework of the answers to be obtained. This makes for an orderly project. A huge mass of conflicting relationships may exist beyond the framework of the experiment but this does not injure the validity of the data found within the prescribed limits.

In patient care this is still true, but is not enough. The experiment must be designed in the same way except that the question cannot be limited by the framework designed, but judgment made and action taken must encompass the huge mass of conflicting relationships which exist beyond the immediate limits of objective data findings.

It is here that superiority in medicine shows. Basic information and objective means of study are used, but that extra bit which means excellence comes from adding the areas of facts to be derived from human contact. The individual himself causes as much variability in a disease as the disease does to the person. It is only through understanding and communication with the patient that this extra information can be obtained. This adds the extra data that is needed for excellence.

Do Communicate

There is an almost daily change in medical relationships and each one of us reacts somewhat differently to each of these. Basic ideals and loyalties seem to conflict at times. In our country, medicine is searching for itself.

Your colleagues are interested in your ideas and your approach to the questions raised for us each day. Your president Dr. Babers, in his responsibility to help find the group role, hunts for guidelines and word from you.

Perhaps your editor, a temporary satellite, can reflect your views to other readers. Do communicate. □

when it's late in life and anxiety and depression coexist...

initial therapy

Triavil® 4-10

Each tablet contains 4 mg. of perphenazine and 10 mg. of amitriptyline hydrochloride

maintenance therapy

Triavil® 2-10

Each tablet contains 2 mg. of perphenazine and 10 mg. of amitriptyline hydrochloride.

appropriate therapy in an appropriate dosage





During the years of declining strength and increasing infirmity, many patients are more sensitive to both the desired response and the unwanted effects of some drugs. That's when low-dosage therapy is needed. And that's when TRIAVIL 4-10, as initial therapy, and TRIAVIL 2-10, for maintenance, can prove particularly useful.

Starting with TRIAVIL 4-10 should help minimize possible dose-related side effects in the geriatric patient with coexisting anxiety and depression. And, subsequently, TRIAVIL 2-10 can increase flexibility in adjusting maintenance dosage.

Activities made hazardous by diminished alertness should be avoided. You will want to inform your patients that the effects of alcohol may be potentiated. Because of the potentiation of other drug effects possible with MAO inhibitors, such agents should not be given concomitantly with TRIAVIL. However, therapy with TRIAVIL can be initiated cautiously two weeks or more after withdrawal of the MAOI drugs. And, until significant remission is observed, close supervision of any seriously depressed patient is, of course, essential to guard against possible suicide. The drug is contraindicated in glaucoma, in patients expected to experience problems of urinary retention, in drug-induced CNS depression, and in bone marrow depression.

TRIAVIL 4-10 & 2-10—tranquilizer-antidepressant therapy especially appropriate for the elderly patient so often intolerant to medication in high dosages.

TRIAVIL® **for moderate to severe anxiety with coexisting depression**

containing perphenazine and amitriptyline HCl
TRANQUILIZER-ANTIDEPRESSANT

For additional prescribing information, please see following page.



TRIAVIL®

TRANQUILIZER-ANTIDEPRESSANT

TRIAVIL 4-10: Each tablet contains 4 mg. of perphenazine and 10 mg. of amitriptyline hydrochloride.
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TRIAVIL 4-25: Each tablet contains 4 mg. of perphenazine and 25 mg. of amitriptyline hydrochloride.
TRIAVIL 2-10: For use in adjusting maintenance dosage. Each tablet contains 2 mg. of perphenazine and 10 mg. of amitriptyline hydrochloride.

for moderate to severe anxiety with coexisting depression

INDICATIONS: Patients with moderate to severe anxiety and/or agitation and depressed mood; patients with depression in whom anxiety and/or agitation are severe; patients with depression and anxiety in association with chronic physical disease; schizophrenics with associated depressive symptoms.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; urinary retention; pregnancy; glaucoma. Do not give in combination with MAOI drugs because of possible potentiation that may even cause death. Allow at least 2 weeks between therapies. In such patients therapy with TRIAVIL should be initiated cautiously, with gradual increase in the dosage required to obtain a satisfactory reponse.

WARNINGS: Patients should be warned against driving a car or operating machinery or apparatus requiring alert attention, and that response to alcohol may be potentiated.

PRECAUTIONS: Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having various modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Not recommended for use in children. Mania or hypomania may be precipitated in manic-depressives (perphenazine in TRIAVIL seems to reduce likelihood of this effect). If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Caution patients about errors of judgment due to change in mood.

SIDE EFFECTS: Similar to those reported with either constituent alone. **Perphenazine:** Should not be used indiscriminately. Use caution in patients with history of convulsive disorders or severe reactions to other phenothiazines. Likelihood of untoward actions greater with high doses. Closely supervise with any dosage. Side effects may be any of those reported with phenothiazine drugs: blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); extrapyramidal symptoms (opisthotonos, oculogyric crisis, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; severe, acute hypotension (of particular concern in patients with mitral insufficiency or pheochromocytoma); skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; endocrine disturbances (lactation, galactorrhea, disturbances of menstrual cycle); grand mal convulsions; cerebral edema; altered cerebrospinal fluid proteins; polyphagia; paradoxical excitement; photophobia; skin pigmentation; failure of ejaculation; EKG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions such as dryness of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in the pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia; significant unexplained rise in body temperature may suggest intolerance to perphenazine, in which case discontinue. Antiemetic effect may obscure signs of toxicity due to overdosage of other drugs or make diagnosis of other disorders such as brain tumors or intestinal obstruction difficult. May potentiate central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol), atropine, heat, and phosphorous insecticides. **Amitriptyline:** Careful observation of all patients recommended. Side effects include drowsiness (may occur within the first few days of therapy); dizziness; nausea; excitement; hypotension; fainting; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of latent schizophrenia (however, the perphenazine content may prevent this reaction in some cases); epileptiform seizures in chronic schizophrenics; temporary confusion, disturbed concentration, or transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of mouth, blurring of vision, urinary retention, constipation, paralytic ileus; agranulocytosis; jaundice. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

Before prescribing or administering, read product circular with package or available on request.

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The AMBAR® SCRAPBOOK of

Obesity Oddities

FACT & LEGEND

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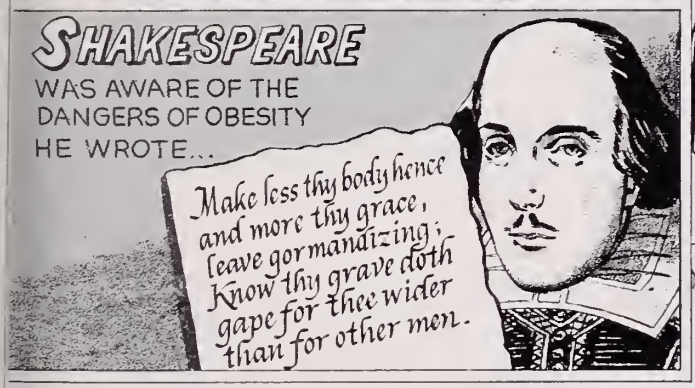
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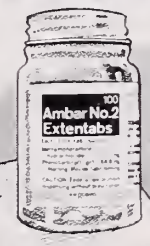


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SHAKESPEARE

WAS AWARE OF THE DANGERS OF OBESITY HE WROTE...





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AN IMPORTANT FACTOR IN LONG TERM THERAPY

ONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

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methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

ne Ambar Extentab before breakfast can elp control most patients' appetite for up 12 hours. Methamphetamine, the appete suppressant, gently elevates mood and elps overcome dieting frustrations. Phenoarbital, the sedative in Ambar, controls irritability and nxiety...helps maintain a state of mental calm and equaimity. Both work together to ease the tensions that erode ne willpower during periods of dieting.

lso available: Ambar #1 Extentabs®—methamphetamine ydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warng: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220 A·H·ROBINS



For the "Cheater Eater"

Formulas: Each 'Dexamyl' *Spansule* capsule No. 1 contains 10 mg. of Dexedrine® (brand of dextroamphetamine sulfate) and 1 gr. of amobarbital, derivative of barbituric acid (Warning, may be habit forming). Each 'Dexamyl' *Spansule* capsule No. 2 contains 15 mg. of Dexedrine (brand of dextroamphetamine sulfate) and 1½ gr. of amobarbital (Warning, may be habit forming).
Before prescribing, see complete prescribing information in SK&F literature or *PDR*.
Contraindications: Hyperexcitability, undue restlessness, hyperthyroidism, porphyria; in patients on MAO inhibitors.
Precautions: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence. Rarely, symptoms of toxic psychosis (hallucinations, confusion, panic states, etc.) may occur with amphetamines, usually after prolonged high dosage. In these instances, withdraw the medication. Use cautiously in pregnant patients, especially in the first trimester.
Adverse Reactions: Overstimulation, restlessness, insomnia, g.i. disturbances, diarrhea, palpitation, tachycardia, elevated blood pressure, tremor, sweating, impotence and headache.
Supplied: In bottles of 50.

Dexamyl®

brand of dextroamphetamine sulfate and amobarbital

Spansule®

brand of sustained release capsules

curbs appetite
encourages normal activity
dispels diet discouragement

SK&F
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Florida Medical | medicolegal

Synopsis of Rape for the Florida Examiner

John R. Feegel, M.D., J.D.

The medical examiner, where such offices have been created by appropriate Florida legislation,[1] is required to examine the victims of sex crimes including but not limited to rape. Frequently, the medical examiner delegates this duty to a gynecologist or other clinician who may be better trained than a pathologist to perform genital examinations on a living patient. Since these patients may be seen by various physicians for the medical examiner or state's attorney where no medical examiner exists, this brief discussion may serve as a review.

Chapter 794 of the Florida Statutes deals with intercourse with unmarried females under age 18 and rape. Section 794.01 provides:

> Whoever ravishes and carnally knows a female of the age of ten years or more, by force and against her will, or unlawfully or carnally knows and abuses a female child under the age of ten years, shall be punished by death, unless a majority of the jury in their verdict recommend mercy, in which event punishment shall be by imprisonment in the state prison for life, or for any term of years within the discretion of the judge. It shall not be necessary to prove the actual emission of seed, but the crime shall be deemed complete upon proof of penetration only.[2]

While it is not "necessary" to prove the actual emission of seed, a smear of the vaginal content showing sperm or an acid phosphatase test on a vaginal swab with strongly positive results makes the case easier to prosecute. Fisher says that nonseminal human body fluids do not exceed 20 units of acid phosphatase while seminal ejaculate varies from 400 to 8,000 and may remain measurable in the vagina for 12 hours but less than 24 hours.[4,5] In the Hillsborough office, levels of 50 units or less of vaginal acid phosphatase are considered to be of dubious significance in the absence of visualized sperm. Negative results in either test do not of course rule out intercourse with a condom or with withdrawal prior to emission.

From the pathology department, Tampa General Hospital, Tampa.

The proof of "penetration" may become a difficult problem for the examining physician, particularly when the hymen has been previously ruptured and the recent forcible intercourse was nontraumatic to the female genitalia. Here, one can report only that intercourse was anatomically possible but that no genital injuries were found. The microscopic and/or chemical tests may be of increased value in such cases and should be performed without delay.

Where the female victim is less experienced with sexual intercourse, particularly where the hymen was intact, genital injuries may be evident. Hymenal injuries may be consistent with penetration by the penis but also can be made with fingers or foreign objects, sometimes by the victim herself. Such self-mutilation may be done to falsely incriminate another person or, more frequently, to provide an alibi for being out all night.

Florida law requires at least some degree of penetration of the female genitalia to sustain a conviction for rape.[6] While most physicians consider penetration to begin at the hymenal ring, all will admit that such penetration can occur through a naturally perforate hymen to a greater or lesser extent without causing lacerations. A hymenal laceration during partial penetration is not required by Florida law.[7]

Consider the problems posed by the following true case:

> A 15-year-old female, recipient of an automobile ride to a remote place in Tampa, was attacked seriatim by three boys appearing to be in their late teens. On questioning, the victim was not sure whether they had actually penetrated her and denied any previous intercourse. Examination by the medical examiner revealed a totally imperforate hymen closing a normal vagina (by rectal palpation). There were no vulvar or rectal injuries.
>
> If her story was true, the three boys attempted to rape this girl. But with a totally imperforate hymen, penetration cannot be substantiated. It appears that whatever activities these boys may have attempted, they cannot be found guilty of rape.

The examining physician must also be aware that where a female victim is put in fear of personal violence, her "consent" to intercourse is no defense to the charge of rape[9,10] and other bodily injuries evidencing her struggle need not be present. However, where the female victim is the sole witness, the physician may be assured that her testimony will be "rigidly scrutinized" by the court to avoid an unmerited conviction.[11,12]

Since the Florida medical examiner statutes also deal with sexual assaults on children, some may question the authority of the medical examiner to examine minor victims without parental consent. The author and the local state's attorney[13] agree that consent of the parent or a court order is not required before the medical examiner may examine the minor presented to him by the police for investigation of a sex crime. In reaching this conclusion, the wording of the statute providing that the medical examiner "shall" perform these examinations was given due consideration.[14]

The law[15] also concerns itself with unlawful intercourse with an unmarried person under age 18 and of previous chaste character. The examining physician may become involved in the proof of physical evidence of previous or present chaste character and should be aware that force or threat on the part of the assailant is not an issue. Injuries may therefore be totally absent. The violated party has consented but, if of previous chaste character and under age 18, her consent to this act is not valid.

Infrequently, the examiner may be asked to see an unmarried female idiot who has had intercourse with a male.[16] Here, consent by the victim is not valid, force need not be proved, and previous chaste character is not an issue. As to the proof of the idiocy, the rape examiner may prudently wish to seek psychiatric or psychological consultation.

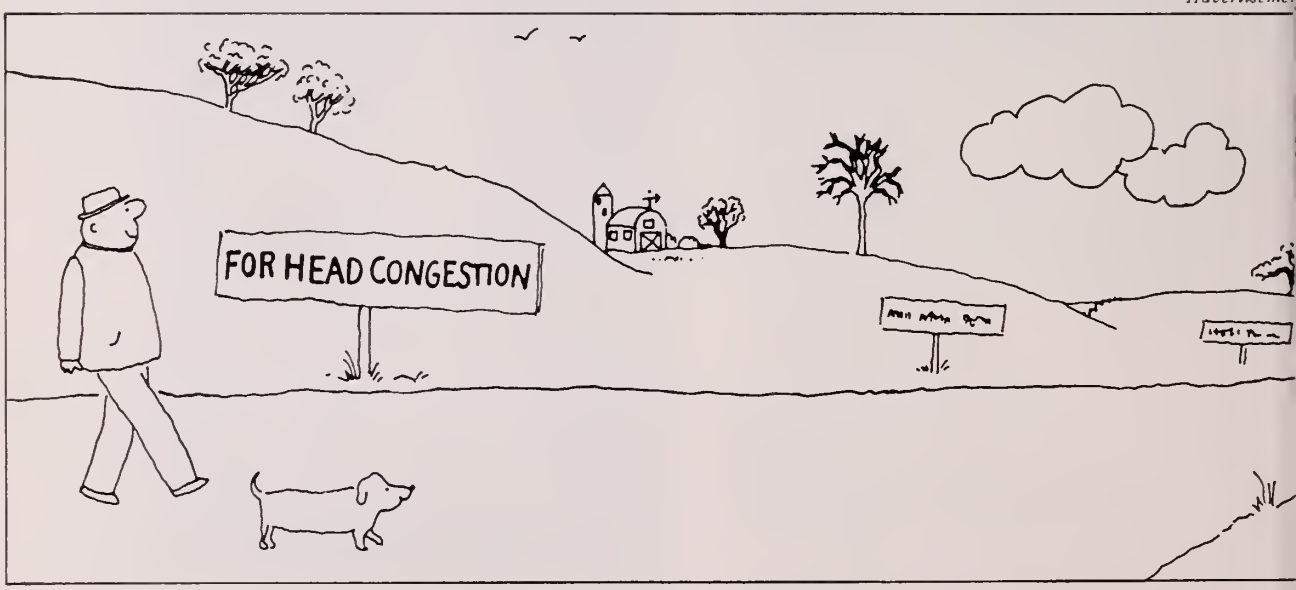
Living sex crime examination is not the province of the medical examiner in most states.[17] In Florida, he is charged with the responsibility and no relief is in sight.

References

1. e.g. Ch. 59-689 Sec. 10, Gen. Laws Florida, 1959 (Hillsborough County).
2. Ch. 794, Sec. 794.01 Florida Statutes.
3. Barker vs. State, 40 Fla. 178, 24 So 69 (1898).
4. Fisher, R. S.: Acid Phosphatase Tests as Evidence of Rape, New England J. Med. 240:738, 1949.
5. Riisfeldt, O.: Acid Phosphatases Employed as a New Method of Demonstrating Seminal Spots in Forensic Medicine, Acta. Path. Microbiol. Scand. Supp. 58:1-80, 1946.
6. Williams vs. State, 53 Fla. 84, So 431 (1907).
7. Harris vs. State, 72 Fla. 128, 72 So 520 (1916).
8. Records of Medical Examiner's Office, Hillsborough County, 1969.
9. Green vs. State, 135 Fla. 17, 184 So 504 (1938).
10. Doyle vs. State, 39 Fla. 155, 22 So 272 (1897).
11. Coker vs. State, 83 Fla. 672, 93 So 176 (1922).
12. Newman vs. State, 196 So 2d 897 (1967).
13. Antinori, P. Jr.: Personal communication, State Attorney's Office, Hillsborough County, (1968).
14. Ch. 59-689, Sec. 10 Gen. Laws Florida (1959).
15. Ch. 794, Sec. 794.05 Florida Statutes.
16. Ch. 794, Sec. 794.06 Florida Statutes.
17. Wecht, C. H. and Collom, W. D.: Medical Evidence in Alleged Rape, in Legal Medicine Annual 1969, Ed: Wecht, C. H., New York, Appleton, Century, Crofts, 1969.

▶ Dr. Feegel, Tampa General Hospital, Tampa 33606.

Advertisement



Examining the Sexual Assault Victim

Arthur Frederick Schiff, M.D.

According to the Florida Bureau of Vital Statistics 15 counties are authorized to have a medical examiners system and 14 counties actually have a system in operation. So far as is known at this time, then, 53 of the 67 Florida counties are without a medical examiner's system.

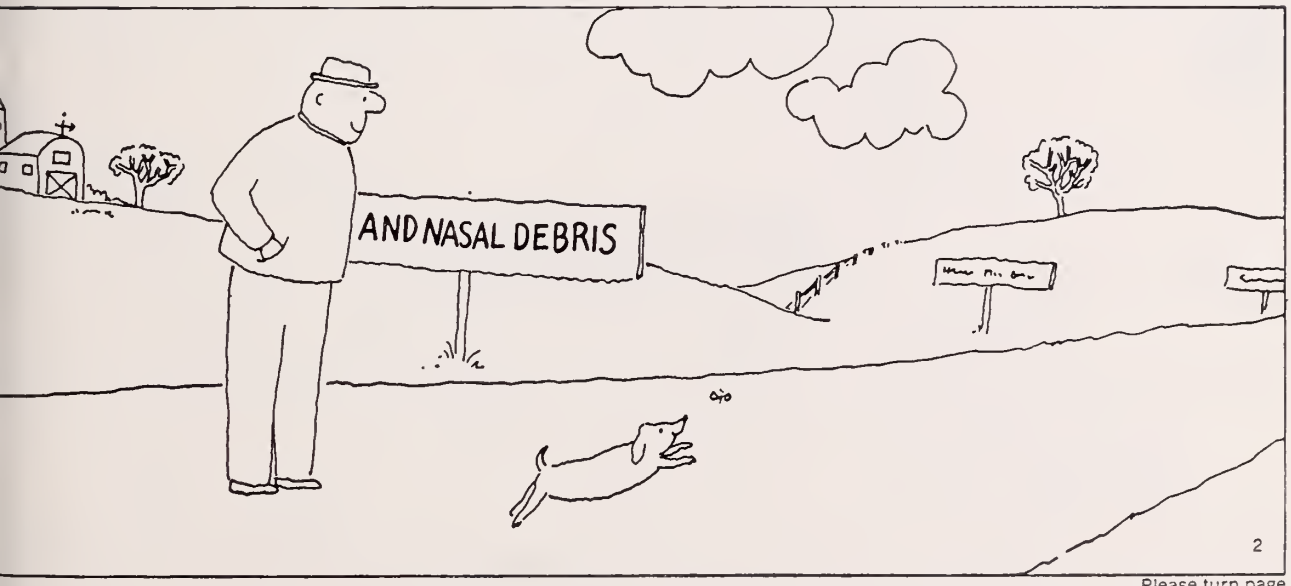
In Dade County, the Medical Examiner's Office which is a completely autonomous unit has as one of its many functions the examination of sexual assault victims. For this purpose, three Deputy Medical Examiners are on 24-hour call. Little is known as to how the other counties process their assault victims, but it is understood that in many counties, either interns, residents, general practitioners, or gynecologists with or without a modicum of experience in this specialized field are called in by police authorities. In some counties, the courts allow testimony from attending physicians to whom the victims had been taken for treatment. It behooves these physicians along with others who may be summoned at any time to know something concerning the method and technique of examination.

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When the accusation of a sex crime has been made, the role of the physician in the investigation should be that of an impartial expert interested in only one thing: arriving at the truth as expeditiously as possible. To reach this goal without stumbling across false clues, the examiner must be alert, discerning, perceptive, and always suspicious. In addition, he must be thorough, yet unhurried. His final report may easily be the basis of exoneration or conviction. In any event, it may influence radically the lives of several persons. The examiner must be certain of all the evidence he obtains; there is no second chance to return later and gather more.

The Ground Rules

There are certain ground rules to which one must closely adhere. Firstly, although the situation cannot be classified as an emergency, the



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examiner should respond as quickly as possible to a call from the police agencies. The sooner he sees the victim, the better able he will be to schematize the time-relationships, especially so if he finds normokinetic or even hypokinetic spermatozoa in a body orifice. In addition, the victim has been told the doctor is coming to examine her. She awaits him anxiously and with some trepidation, not knowing what precisely to expect. Also, the officers assigned to the case are eager to learn quickly what merit the complaint has so that they may either end or further their investigation.

Secondly, the examiner should not attempt to rely on his memory alone. During the history-taking and examination, he should make copious notes. Several times, the author has experimented by setting up a small portable tape recorder during the interview, but the victims seemed to freeze up at the sight of the microphone. Very little time should elapse between the conclusion of the examination and transcribing the notes into the final report which is then an official document. In the Dade County Medical Examiner's Office, an original and three copies are made. The original report is kept in the files of the Medical Examiner's Office. A copy is sent to the investigating agency, another to the state attorney's office, and one is retained for the personal files of the examiner.

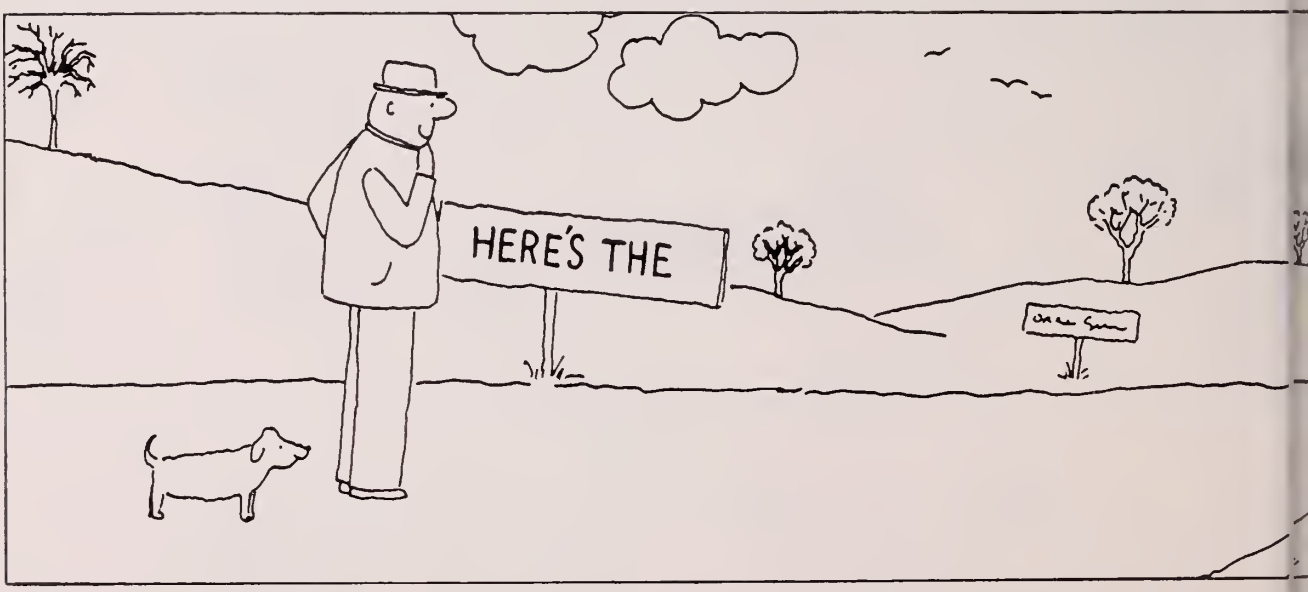
Thirdly, the physician should obtain the victim's written and witnessed consent before examining her. If the victim is a child or a mentally disturbed person, either a parent or guardian may authorize the examination by signing a consent form. If the parent or guardian cannot be reached, permission may be granted by the appropriate court. In Dade County, the judges of the Juvenile Court have been very cooperative in granting such permission via telephone after being apprised of the facts. As a last resort, if no judge is available, the examiner can always fall back on chapter 80228 section 10 of the Florida General Laws. Loosely translated, the section means that "any law enforcement officer" can order an examination if he has cause to suspect a crime has been committed.

Fourthly, lest a charge be levelled against the physician himself, he should never make an examination unless a third party is present in the room. In his report, the physician should state the name of this third party. He must always include the date, time, and place of the examination.

Lastly, each case must be prepared as though it will end up in court and a man's future will hinge on it. Frequently, this writer has seen a case in which the circumstances are such that apprehension of the assailant appear nihil. A tendency may develop to lower one's guard and not be so scrupulous in collecting evidence. Yet, a year later, a suspect may be picked up on an unrelated sexual assault and confess to several other cases. The moral here is: don't get lazy.

Definitions

At this point several definitions must be inserted. It is well known what sexual assault means, but there is some confusion concerning the two most common types: rape and sodomy. Rape, a legal term, has been defined[1] as "the carnal knowledge, to a lesser or greater degree, of a female, not



the wife of the assailant, without her consent and by compulsion either through fear, force, or fraud, singly or in combination." Full penetration is not necessary. Once any portion of the penis moves between the labia, carnal knowledge is accepted. Nor is an emission a requisite.

Sodomy, or the legal English term, buggery, has been defined[2] as "a common law crime deriving its name from the biblical city of Sodom and broadly and comprehensively speaking consists of unnatural sexual relations as between persons of the same sex or with beasts or between persons of different sex but in an unnatural manner." It is generally accepted today, however, that sodomy is sexual intercourse per anum between two males or between male and female. When the passive role is played by a boy, the term "pederastia" is employed.

The Report

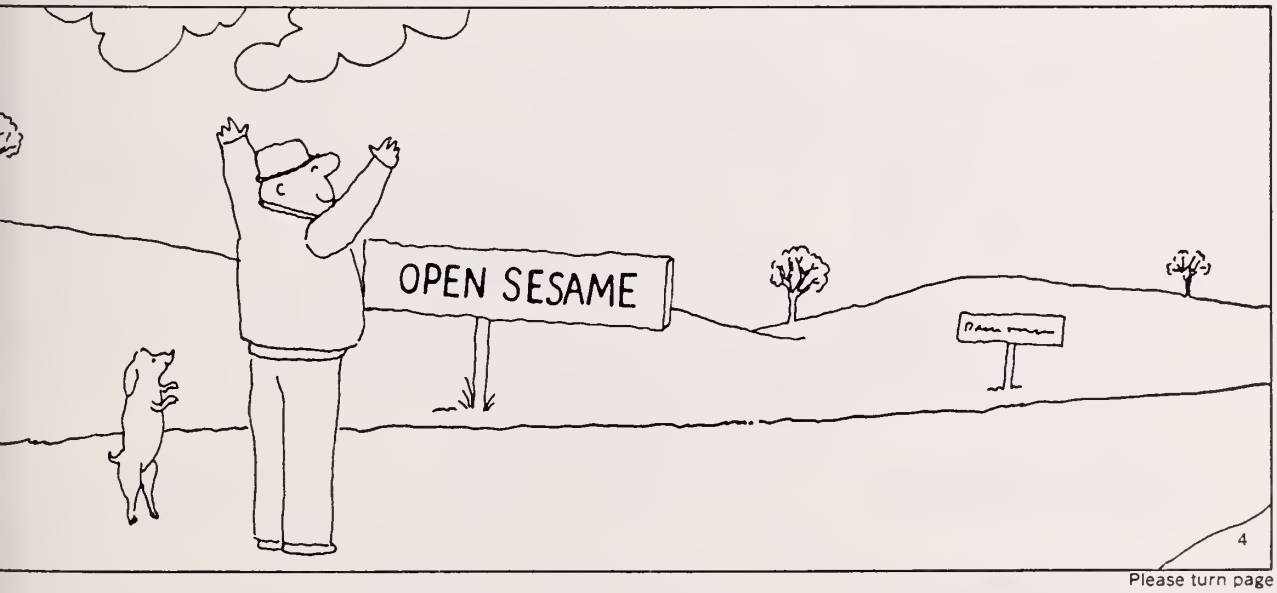
The complete report is divided into two parts: history and physical examination.

History

Cabot[3] states "the history is the key to diagnosis." Unfortunately and particularly in these cases, one cannot always believe this. In disease, while answering the physician's question, the patient is usually motivated by a desire to get well, to experience good health once more and the assumption is that the patient is not lying. Here, other thoughts might move the victim to color his or her narrative and even to tell untruths. Blackmail, spite, revenge, or plans for a eventual payoff are not uncommon motives. The history, then, might be highly unreliable. That is why the courts label this important portion of the report "hearsay" and do not allow it into evidence. Curiously, in England, however, the history as recorded by the doctor is known as "the fresh complaint" and is admissable as evidence.

Although some law enforcement officers feel that the physician is treading on their private preserve, nevertheless, in the interests of a good history, the following points should be included in the report:

1. Specific—the five W's of journalistic reporting
   a. Who? Sex, race, approximate age, build of assailant; known or unknown; distinguishing features.
   b. What? What happened? Listen. Do not ask leading questions but encourage the victim to tell the story in his or her own fashion. Nature of the act? Frequency?
   c. When? Pinpoint the time of the assault if possible. This may be done by associating with a radio or TV program or when the victim left the bar or a friend's house. Or learn the time the initial call was received at the police agency and work backwards.
   d. Where? The backseat of a car, residence, abandoned house, isolated wooded area. The police report can help here.
   e. Why? Was the victim drinking at a bar with the assailant? Did she seek out trouble by accompanying the assailant to his room?



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2. General
   a. Marital status. Children? Ages?
   b. Menstrual history. Date of last menses.
   c. Date of last sexual union prior to present incident. Was a condom used?
   d. Recent genital diseases.
   e. Operations.

In addition to these points, it is also necessary to inquire whether the victim has urinated, defecated, showered, washed, or, in the case of a female, douched. Graves[4] writes "In my experience most women, unless physically unable to do so, take a douche after the attack . . ." Such has not been the author's experience. In the hundreds of patients he has examined, extremely few, even those who have had the opportunity, have douched. This might be because the police officers on the scene, mindful that significant evidence might be lost, warn the victim not to urinate, defecate, wash, or douche.

It would be helpful also to know whether the victim thought or knew definitely whether a contraceptive device had been worn and whether the assailant had experienced an orgasm. The assailant who employs a condom is a rara avis indeed.

Physical Examination

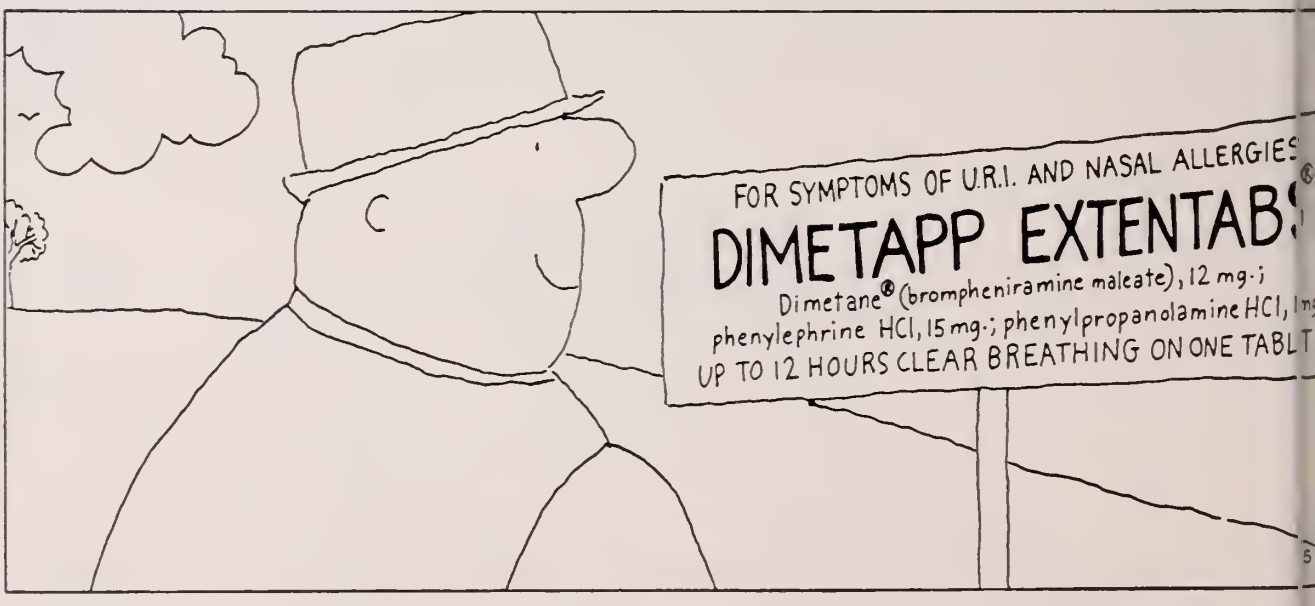
This section of the record is of the greatest importance, deserves the closest regard for detail, and will come under the most searching scrutiny. Consequently, before proceeding to the general and specific physical examination, the physician must touch upon two points.

Firstly, he must comment on the victim's clothing. What is the overall impression? Is the neckline too low allowing a good view of the cleavage of the breasts? Are hip-huggers too snug? Is the miniskirt too mini? In short, is the dress provocative? What damage has been done? Are there tears? Do they appear to have been made recently? Are they along the seams or across the material? Are buttons missing? Are there stains? Blood, grass, mud, seminal? Is anything obvious such as dirt, blades of grass, bits of leaf, straws adherent to the cloth? The examiner will not be asked to certify under oath what stains were present since the police agency usually requests the clothing for further study in the crime laboratory, but all the facts should be noted in the protocol.

Secondly, the physician should describe the victim's appearance and emotional state. Is the individual disheveled and tousled or tidy and well-combed? Is the victim nervous, distraught, bordering on hysteria or calm and self-possessed? One need not be a psychiatrist to note to what degree the victim is emotionally upset. Is the subject coherent and cooperative or belligerent and truculent? Is he or she under the influence of alcohol or drugs?

General

This portion encompasses the body as a whole other than the pelvic area which is reserved for the specific examination. The body surface is examined carefully for recent abrasions, contusions, lacerations, scratches, bite and rope imprints, stains, and any other marks which could be attributed to the incident. The physician looks especial-



ly for bruises and scratches about the mouth, throat, wrists, arms, and the inner aspects of the thighs. The back is checked for any kind of pressure marks from having lain on hard ground or gravel. This writer usually points out any recent injury, asking the victim if the injury had been there prior to the assault. Occasionally, it is learned that the injury had been acquired in some innocuous fashion prior to the assault. The author remembers one case which presented with a wide variety of bruises and lacerations. He learned that five hours prior to the alleged assault the victim had fallen off her roof while trying to adjust a TV antenna. Sometimes, the author photographs injuries, noting the fact in the record. Fingernails should be checked to see if they are broken off. Particles of foreign matter or tissue beneath them should be recovered and given to the crime laboratory for further identification.

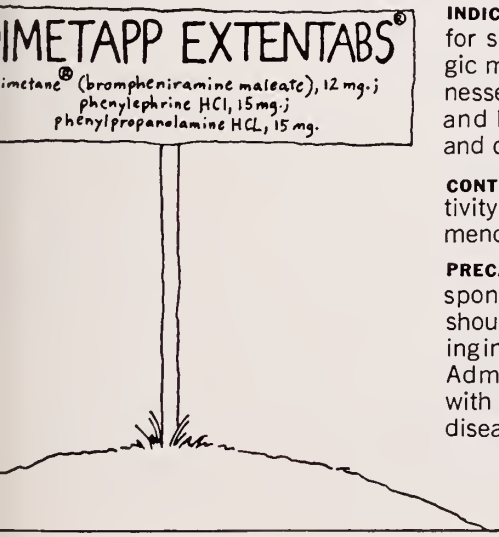
Specific

The specific portion of the examination focuses on the organ involved, whether it be the genitalia or the rectum. The extent of any injury is determined and described. Comments should be made about the pubic area, thighs, labia, introitus, hymen (if present), vagina, cervix, uterus, and adnexia. Is the vulva bruised, lacerated, swollen, tender to the touch? Is the perineum intact or lacerated?

The hymen can often be a point of contention. Of course, no problem exists with the married or parous female as well as with the woman who has enjoyed extensive sexual activity. The hymen is absent, the vaginal orifice is enlarged, and small knobs of tissue known as carunculae hymenalis extend from the hymenal ring. This set of circumstances is labelled "marital introitus." However, in a young girl of 14, 15 or 16 who declares herself to be a virgo intacta, yet whose manners and dress belie her statement, some question may arise. Since so much can depend upon so small a piece of tissue, only about 1 mm. thick which, if stretched tightly, would scarcely cover a nickel, extra space will be given it.

There is much dramatic and emotional misinformation flying about concerning the hymen. The layman imagines it to be an easily viewed, easily identified membrane which seals off completely the vagina from intrusion. He further imagines that what he metaphorically calls a maidenhead is the sole proof of virginity. This is not often the case. Firstly, in many instances, the hymen is not so easily viewed, especially in a crying, squirming child and, therefore, not easily identified. Secondly, except in cases of imperforation, it does not seal off completely the vagina. Thirdly, it is not absolute proof of virginity. Cases have been described where repeated coitus has failed to rupture a particularly tough membrane. On the other hand, minor trauma such as falling from a bicycle has caused a delicate hymen to tear. In some instances, it is even difficult to say whether a hymen has been ruptured or not. For example, a fimbriated hymen may seem to be ruptured at first glance, but after putting it on the stretch and viewing it with a magnifying glass, the examiner may declare it intact.

Stander[5] lists half a dozen different varieties of hymens. Schauffler[6] pictures four different



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types. In addition, the hymen will appear different at various stages of an individual's development much as a nose will appear different. The infant's hymen is a protruding cone looking vaguely like a pouting mouth. Later on, in early childhood, it loses its pouting aspect and is a thin, flattened membrane with delicate edges. Then prior to menarche, it assumes again its earlier appearance. At birth, the diameter is approximately 0.4 cm. This figure usually triples by menarche.

Practically anything can breach the hymen, the most obvious instrument of rupture being the erect penis. Yet, bottles, fingers, internal tampons, smooth wooden handles, spoons, syringe nozzles, and vaginal speculi have all been known to rupture hymens.

If the examiner finds a normal, untraumatized hymen it would be wise to measure the hymenal orifice. This can be done easily by placing the tip of the forefinger or, in the case of small children, the little finger at the orifice and passing it gently into the vagina until a sharp, tight edge is felt; the patient complains of discomfort and even pain. A mark is made on the gloves finger which is then withdrawn. A piece of string is placed around the finger at the indicated point, removed, and measured to determine the circumference of the orifice which, in a virgin, should measure approximately 2.5 cm. The average erect adult penis has a circumference of between 10 cm. and 13 cm. Naturally, there are exceptions to these figures. A hymenal orifice might admit two or more fingers with ease, yet be virginal.

The physician must make one of four possible decisions:

1. The hymen is present, intact, trauma-free and normal in every respect. The assumption is that the female is a virgin.

2. The hymen is present, intact, but shows some old scarring. If the scarring is the result of masturbation or physical trauma other than coitus, the female is a virgin.

3. The hymen has been recently ruptured. The physician describes the injury in detail. The author fully agrees with Cosgrave's[7] statement that "rupture of the hymen is almost invariably accompanied by bleeding." However, the bleeding is usually minimal, confined to an oozing from the retracted bits of tissue. Occasionally, rough stretching may cause a vertical laceration on the posterior wall of the introitus just before the hymenal ring.

4. The hymen is completely absent and the introitus is either non-virginal or marital. The distinction here—fostered partially by the history and findings—is a subtle and arbitrary one. If the physician knows for a fact that the victim is married or had been, or had given birth to one or more children and if he finds the introitus wide, the hymen completely obliterated, he may boldly describe the introitus as "marital." If he examines a known prostitute who has never been married or pregnant, he may still use the ambiguous term "marital." If, on the other hand, the hymen is definitely absent, the orifice admits two fingers fully, the victim admits to an occasional sexual excursion, but has never been married or delivered a child, he can safely call the introitus "non-virginal."

Occasionally, the marital or non-virginal may have a vertical laceration caused by a disproportion between a large penis and a narrow introitus.

It must be emphasized that, in many instances, the decisions are not easy to make. Gonzales[8] declares: "It is not possible to give a definite decision concerning virginity in a case, unless the individual presents characteristic signs. A small genital opening and an intact but fragile hymen are in favor of virginity. A large opening and carunculate myrtiformes would suggest absence of virginity. In other cases the signs are less clear and a diagnosis cannot be made." Cosgrave[7] warns, "a report of the findings and conclusions should be made, bearing in mind that types of hymen vary and the fimbriated or shaggy type may deceive the inexperienced."

If the hymen is intact, swabs are taken at the vestibule for later laboratory work and the examination is terminated. If the hymen has been ruptured or is absent, an unlubricated Graves or Sims speculum is passed gently through the introitus and into the vaginal barrel. Here, the examiner checks four points:

1. Appearance of the wall. Injuries? Locate and describe. Is the mucous membrane dry, glistening, atrophic, rugal, ischemic or injected?

2. Contents. Once the writer found a used condom in the vagina; another time, a thermometer. Is there a discharge from the cervical os? Evidence of venereal disease? Is any material present, especially in the posterior vault? Describe. Is it grey, opaque, creamy, yellow, thin, tenacious? Estimate the amount. Aspirate with a pipette for laboratory testing. Smell. Does it have the characteristic chestnut blossom scent of seminal fluid? Is frank blood present? Source. From the cervical os? From a deep laceration? Is the victim menstruating?

3. Cervix. Appearance, position, approximate size. Is there a pin point os to substantiate the history of never having had a child? Is there any erosion?

4. Bimanual to rule out any existing pregnancy. Adnexia for signs of infection. Tumors?

Smears from the urethra and cervix are sent to the Florida Division of Health laboratory for bacteriological examination for gonorrhea. A negative smear at the time of examination assumes great significance if a positive smear is found some five or six days after the assault and if a suspect is seen to have a full-blown case of gonorrhea.

The anal region should always be inspected, particularly in a complaint of sodomy. With an assistant stretching back the skin of the buttocks, the examiner seeks bruises, any inflammatory reactions, fissure of the anal mucosa, and evidence of lubrication. The experienced sodomist, knowing the anal mucosa is relatively dry, will use some type of lubricant such as hair cream. The physician also looks for linear tears extending from the anal rim into the anus. He must decide whether the victim is a homosexual who has indulged frequently in sexual intercourse per anum. A relaxed anal sphincter—almost to the point of gaping—along with loss of puckering of the mucous membrane strongly suggests habitual sodomy as does chronic fissuring of the anus. The size of the anal opening should be obtained in the same fashion as described for the hymenal orifice. An unlubricated anoscope is then carefully inserted with the examiner noting how much pain this causes. Both injury and any foreign material other than fecal matter is sought. Injuries are described and any material is either swabbed up or aspirated for laboratory examination.

Laboratory Examination

It has been written that pregnancy is the only definite evidence of intercourse.[9] It is, however, hardly a practical solution in this instance. To corroborate the victim's claim of penetration, it is necessary to discover the product of penetration, viz., spermatozoa, either motile or non-motile. Jones[10] affirms, "Other evidence being in agreement if any one thing can corroborate the commission of the complete offense of rape, then the presence of numerous sperms on a vaginal swab is that one thing." It must be emphasized here, though, that as stated in "Definitions" emission is not a prerequisite for the charge of sexual assault. If evidence of emission is found, it strengthens the case for "recent sexual intercourse." On the other hand, if evidence is lacking, one cannot presume recent sexual intercourse did not occur.

There has been much controversy on the duration of motility of spermatozoa in the female genital tract and, especially, in the vagina. Pollak,[11] who has exhaustively researched the subject, claims: "In one case immobilization of the spermatozoa took place after one hundred and ten hours, in two cases after forty-five hours, in one case after three hours and in one after three minutes." He goes on, "According to various observers, spermatozoa in the vagina retain their motility for from 30 minutes to 28 hours." Bornstein[9] comments: "I was unable to obtain from the literature a definite answer as to how long after intercourse it is possible to find motile or non-motile spermatozoa. In my own experience motile sperm are found within 12 hours after coitus, non-motile spermatozoa for about 48 hours." The author has found non-motile spermatozoa as early as 30 minutes and motile spermatozoa as late as 10 hours after coitus. He believes these incidents to be the exceptions and agrees with Smith[12] who has written: "The evidence points to a comparatively short life of sperm in the female tract and the period appears to get shorter with the number of observations. It is at present believed that the life of sperm in the vagina is a matter of hours." Today, the evidence points to three hours more or less. The favorable clime of menstruation may prolong motility another few hours.

There is a general tendency to equate motility with life and non-motility with death. In the courtroom, many attorneys will use the words "motility" and "living" as synonyms. This premise seems warranted. But when the same attorneys interchange the words "non-motile" and "dead," this writer emphasizes the point that no one knows at what moment death comes to a non-motile spermatozoon. This logic is used in marginal cases of three, four and five hours. In truth, when the examination is made some 10 hours after an assault and non-motile spermatozoa are observed, one concludes they are dead.

To detect spermatozoa, one drops a minute amount of the vaginal aspirate on a slide and places a coverslip over it. Remembering that a spermatozoon is about 1/500 of an inch long or about 1/3 the diameter of a red blood cell, a magnification of 500 should be used with the condenser stopped down almost all the way. At one time or another, curiosity has led most medical students to view spermatozoa under their microscope lens;

therefore, physicians are familiar with these tadpole-like cells. Depending upon the time interval and certain other factors such as the environment of the vagina, a woman's immune reaction, and their source, they are either wiggling fiercely, swimming energetically in and out of the microscopic field, moving about sluggishly, almost spent, or lying motionlessly in a cellular debris. Normally, immediately after coitus, anywhere from 10% to 15% are immobile. If only an hour or two have elapsed since coitus, one would normally expect to find a good 50% actively motile. A stained smear of the semen is not prepared unless the writer sees immature or abnormal spermatozoa, a fact which later might be of utmost importance for comparison purposes. Some investigators stain and file all smears for legal purposes. However, it is the author's belief that if the court accepts his word under oath for the authenticity of a particular stained slide certainly the court will accept his word for what he—as an expert—saw and recorded on paper.

If a careful search of the slide reveals no spermatozoa, the examiner proceeds to the next step: a chemical test for semen. This subject has been covered adequately in another publication;[13] however, to review briefly: seminal fluid is rich in a certain enzyme, acid phosphatase. The enzyme's presence in extremely high concentration is the basis of the qualitative acid phosphatase test. In lieu of finding spermatozoa, the test is accepted in the courts as proof of the presence of seminal fluid. The test is simple, consisting of adding two drops of a suitable substrate to the suspected material, then using a diazonium salt to bring out the characteristic purple color of an azo dye.

There are other methods[14,15] to demonstrate the presence of seminal fluid, but in comparison with the time saving acid phosphatase test they are cumbersome and add nothing to the full picture.

Some pertinent articles have gone into studied detail on the identification of blood stains, examination and comparison of pubic hair, and analysis of substance found beneath the victim's fingernails. These examinations belong in the domain of the crime laboratory which, in Dade County, assumes this responsibility.

Conclusion

By examination's end, the physician has certain definite facts to record. Later as an expert witness in court, he may be called upon to render an opinion but until then he must confine himself to facts. For example, he should be able to state whether or not the victim had sustained injury and had been of "previous chaste character;" whether he noted a martial introitus and evidence of recent sexual intercourse. Under no circumstances, regardless of personal opinion, can he record that the victim had been raped. He was not present at the time of the act and must leave to either the judge or the jury that decision. As an aside, it is interesting to note that the physician is oftentimes considered an aide to the prosecution and an adversary of the defense. This is not of the physician's choosing. Despite the American doctrine that a man is innocent until proven guilty, once the arresting officers are convinced sufficiently by the evidence to contact the State Attorney and the State Attorney is satisfied that the circumstances warrant the filing of charges and the Justice of the Peace feels he must pass the case along to the Grand Jury for an indictment and the Grand Jury is impressed enough with the information to hand down an indictment, and the case finally reaches the Criminal Court, the two sides are firmly drawn up and the physician who, all the while, has been trying to help uncover the truth is, indeed, a witness for the prosecution.

It is rare that everything discussed in this paper appears on a routine report. As discussed previously, some law officers even prefer less of a history than is suggested here. However, these are the guidelines to be used in approaching the ideal report.

Examining children is not too much different from examining adults except that the physician must show far greater tact and patience to both the frightened child and the distracted parents. Histories, epsecially in young children, are difficult to obtain. The examiner must first learn what terms the child has at his or her disposal and then employ the child's terms for such things as penis, vagina, and "milk" coming out of the "dickie." The physical examination must be done with much kindness and gentility. It should be remembered that many children, particularly those with pinworms, might have scratches on the external genitalia which mean nothing more than the child has been scratching. The mucous membrane of the vestibule might be greatly injected from rubbing up against furniture and have absolutely no bearing on the present incident. Naturally, the tests for spermatozoa and acid phosphatase are similar as in adults.

Summary

Since a Florida doctor may be called upon at any time to examine an alleged victim of sexual assault, he should be prepared to perform this specialized examination. He should be an unbiased medical observer who carefully and conscientiously reduces his findings to a concise report mindful that it will have a strong bearing on future legal proceedings concerning the case.

References

1. Schiff, Arthur F.: Statistical Features of Rape, J. Forensic Sci. 14:102-110, 1969.
2. Ballentine: Law Dictionary with Pronunciations, 2nd ed., Lawyer's Cooperative Publishing Co., 1948.
3. Cabot, Richard C. and Adams, F. D.: Cabot's Physical Diagnosis, 12th ed., Baltimore, Williams & Wilkins Co., 1942.
4. Graves, Lester R. and Francisco, J. T.: Clinical and Laboratory Evaluation of Rape, J. Tennessee M. A. 55:389-394, 1962.
5. Stander, Williams: Obstetrics, 7th ed., New York, Appleton-Century-Crofts, Inc., 1937.
6. Schauffler: Pediatric Gynecology, Year Book Publishers, Inc., Chicago, 1958.
7. Cosgrave, May St. John: Medical Examination in Alleged Sexual Offences, J. Forensic Sci. 3:94-99, 1962.
8. Gonzales, Thomas A.; Vance, Morgan; Halpern, Milton, and Umberger, Charles J.: Legal Medicine, Pathology and Toxicology, 2nd ed., New York, Appleton-Century-Crofts, Inc., 1954.
9. Bronstein, Frederick P.: Investigation of Rape, Medical Trial Technique Quarterly (1963 annual) 229-239, Callaghan & Co., 1963.
10. Jones, D. N.: Task of the Forensic Science Laboratory in the Investigation of Sexual Offenses, J. Forensic Sci. 3:88-93, 1962.
11. Pollak, O. J.: Semen and Seminal Stains, Arch. Path. 35:140-196, 1943.
12. Smith, Sidney and Simpson, Keith: Taylor's Principles and Practice of Medical Jurisprudence, London, Churchill & Co., 1957.
13. Schiff, Arthur F.: Modification of the Berg Acid Phosphatase Test, Submitted to Journal of Forensic Science, 1969.
14. Thornton, J. I.; Dillon, B. S. and M. Crim, Duayne J.: Identification of Seminal Stains by Immunodiffusion on Cellulose Acetate, J. Forensic Sci. 13:262-266, 1968.
15. Levonen, Eeva: Method for Identification of Seminal Stains by Paper Chromatography, J. Forensic Sci. 5:102-109, 1960.

▶ Dr. Schiff, 1912 S. W. 7th Avenue, Miami 33129.

editorial comment

JOSEPH H. DAVIS, M.D.

In this issue, Dr. John R. Feegel and Dr. Arthur F. Schiff have reviewed many of the legal and medical problems associated with the examination of victims of alleged sex crimes, a function which devolves upon pathologist medical examiners in some counties of this state. Florida is peculiar in the lack of uniformity of laws pertaining to medicolegal investigation, often leaving it up to local counties to have legislation enacted without any prior consideration of facilities, needs, or experience. Recently this has been a matter of serious legislative concern for the Florida Medical Association.

A physician's role in examination of victims of sex crimes is twofold. He must be concerned for the welfare of the patient and direct the police to have the patient receive proper care. Also the examining physician should remember that his role is not to determine if rape occurred but to acquire as much evidence as is possible which would allow legal authorities to substantiate or rule out such a charge. For example, lack of semen may be a common finding especially if the crime was associated with high levels of alcohol or some other psychological problems associated with impotency. The physical examination must be total, for injuries elsewhere may be of critical importance. Preservation of clothing is equally important as it may contain stains, foreign matter, blood, and other important evidence. The physician and police must maintain close liaison with each other during this vital phase of the investigation.

Although there may be a local law requiring the medical examiner to perform the examination, it is wise to acquire permission from the legal guardian of a child and, in the absence thereof, to have an understanding with the juvenile court that permission to examine will be forthcoming when any child is brought for examination without parental consent. This serves as additional legal protection for the physician as well as alerting the juvenile court to a situation with which it should be familiar.

As has been previously noted by Dr. Schiff, complaints of sex crimes are on the increase. The "rape rate" for Florida in 1965 was 13.3 per hundred thousand, 14.7 in 1966, and 15.2 in 1967. Dade County had 178 complaints of rape in 1965, 200 in 1966, and 229 in 1967. Approximately 62% of the complainants had no physical injuries whatsoever, 21% had only injuries of the head and neck, 10% had evidence of genital injury alone, and 7% had both genital and other injuries. Dr. Joseph C. Rupp, of Fort Lauderdale, has reported valuable studies of sperm survival and acid phosphatase activity in victims of sexual assault. It is hoped that physicians performing this service shall continue to document and share their experiences with their fellow physicians.

▶ Dr. Davis, Office of Dade County Medical Examiner, Miami 33136.

Dr. Davis is Dade County Medical Examiner, Miami.

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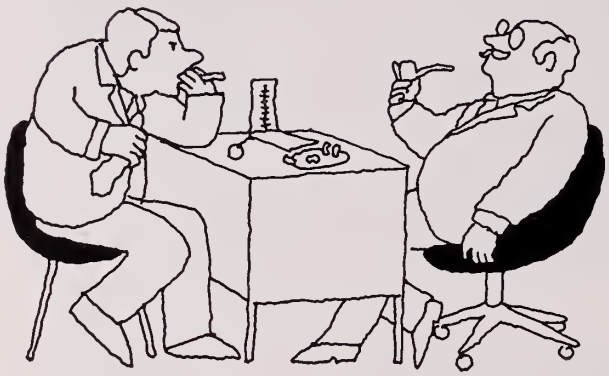
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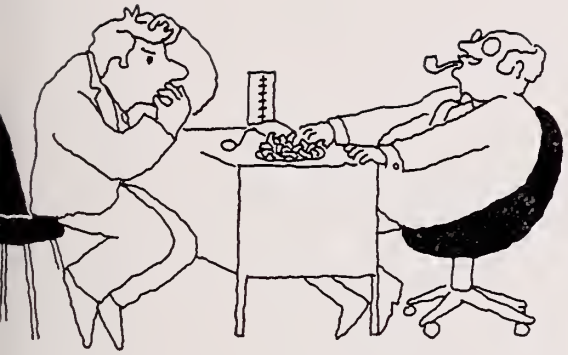


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avoid hypotension during surgery, discontinue therapy with thi
two weeks prior to elective surgical procedures. In emergency
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measures as indicated. Because of the possibility of progres
renal damage, periodic kidney function tests are indicated. Disc
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be precipitated. Electrolyte imbalance, sodium and/or potass
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Delegate Present

W. Harold Parham
Executive Vice President
Florida Medical Association

Dear Mr. Parham:

In reading over the July, 1969 issue of the JOURNAL, I note with some dismay on page 491 which lists the delegates present at the Second House of Delegates' meeting that I am listed as being absent. Nothing could be further from the truth, as you know. In further testimony of this, on page 498 I am listed as speaking in discussion of Resolution 69-17; on page 531, my comments in reference to Resolution 69-27, which had been introduced by me, are recorded, and on page 545 my comments in reference to Resolution 69-9, "Blue Shield Payment Schedules as Percentages of Usual and Customary Fees," simultaneously introduced by Polk and Duval counties, my comments in behalf of this resolution are listed.

In view of the abundant written testimony as to my presence at the Second House of Delegates, will you please correct your official records, and arrange for a correction to be published in the JOURNAL with a copy to the Polk County Medical Association Bulletin so that my confreres here in Polk County won't accuse me of being derelict in my responsibilities as delegate?

J. GERARD CONVERSE, M.D.
WINTER HAVEN

Dear Dr. Converse:

This is to acknowledge your letter of July 19 concerning your attendance at the Second House of Delegates in May.

There is no question at all about your being in attendance at the Second Meeting of the House of Delegates. Our official roster of attendance is submitted to us by the Credentials Committee of the House of Delegates. Apparently your attendance card was not filled out when you entered the House of Delegates meeting, or it was lost.

I am terribly sorry that this misunderstanding has arisen, and I will call it to the attention of the Speaker of the House of Delegates and the Editor of the JOURNAL.

Thank you for calling this to our attention.

W. HAROLD PARHAM

House of Delegates' Topics

Dear Editor:

The Executive Committee at its meeting on June 28, 1969, gave careful consideration to the plans for the 1970 annual meeting of the Association. It was believed that better participation and attendance of the members who are not delegates would be stimulated if the topics to be discussed by the House of Delegates and its reference committees were more widely circulated to the membership.

A motion was carried unanimously by the Executive Committee to recommend that a special article be published in the convention number of the JOURNAL, outlining the major topics for discussion by the House of Delegates.

Your consideration of this recommendation will be appreciated.

FLOYD K. HURT, M.D.
SECRETARY-TREASURER
FLORIDA MEDICAL ASSOCIATION
JACKSONVILLE

Excellent. Volunteers needed.—Ed.

Dyslexia

Dear Editor:

I should like to make a preliminary report on treatment of selected cases of dyslexia.

To date, 50 cases of "dyslexia" have been treated, each patient being made to see normally when a prosthesis is on the eye. For treatment, only cases giving definite history or the finding of the following are accepted: reading, writing, spelling in reverse or backward; may read across page and be unable to find next line; may put in or leave out words. It is common to substitute words.

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After a few days, it is often necessary to give a lens that will rest more over the center of the cornea.

Discussion of the many phases of the treatment of dyslexia is not attempted in this communication. Giving victims of dyslexia normal vision is one of the most rewarding experiences in all my years in practice.

FREDERICK E. HASTY, M.D.
CORAL GABLES

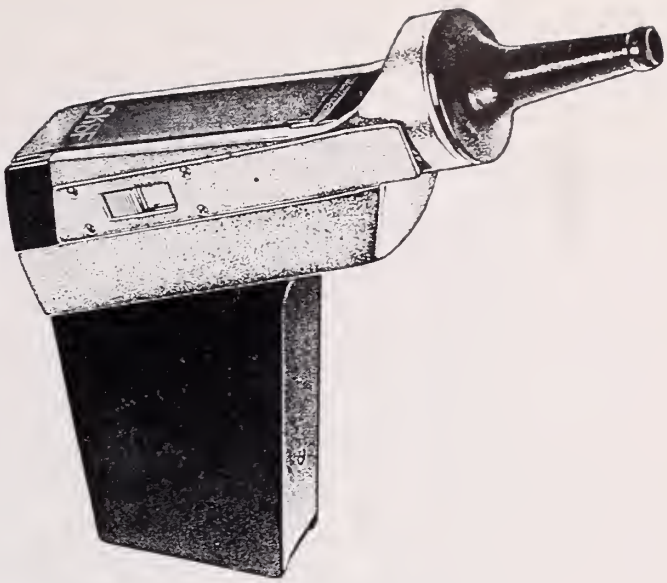
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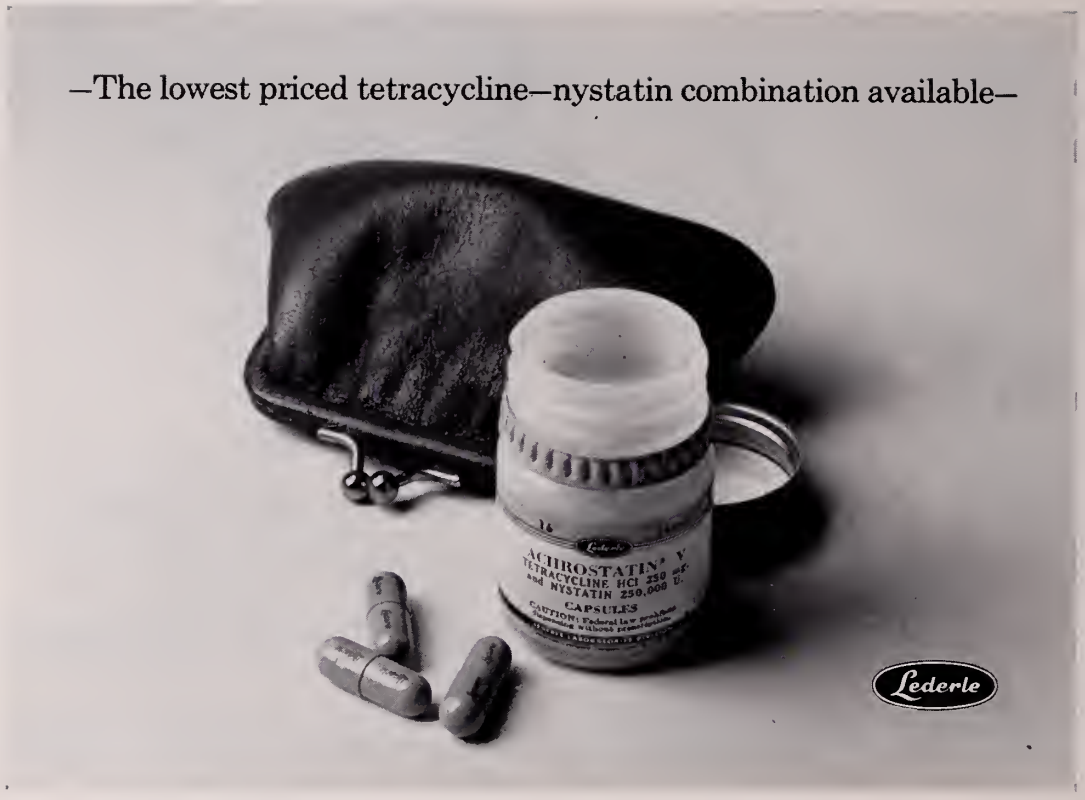
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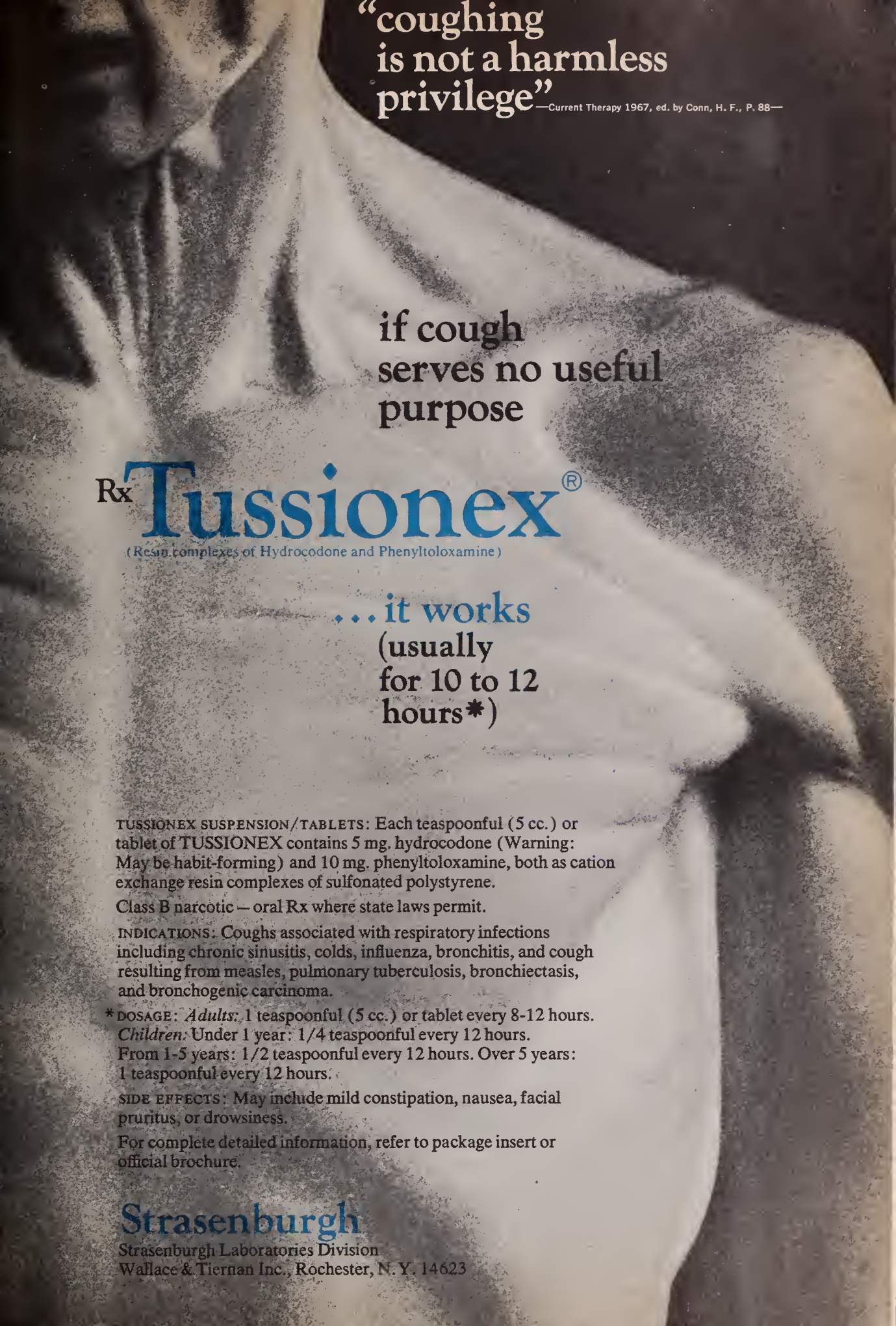
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The deltoid area should be used only if well developed such as in certain adults and older children, and then only with caution to avoid radial nerve injury. Intramuscular injections should not be made into the lower and mid-thirds of the upper arm. As with all intramuscular injections, aspiration is necessary to help avoid inadvertent injection into a blood vessel.

Increased intracranial pressure with bulging fontanelles has been observed occasionally in infants receiving therapeutic doses of the drug, but such signs and symptoms have disappeared rapidly on cessation of treatment with no sequelae.

Adverse Reactions: Subcutaneous and fat-layer injection may produce mild pain and induration which may be relieved by an ice pack. Very mild gastrointestinal disturbances, not requiring discontinuance of the drug, may occur occasionally. Allergic reactions, including anaphylaxis, rarely have been observed.

Dosage: *Adult:* The optimal dosage varies, depending on the type and severity of infection. Unless otherwise specified, a dose of 100 mg. every 8 to 12 hours, or a single daily dose of 250 mg. should be adequate for the treatment of most mild or moderately severe infections. In severe infections, 100 mg. every 6 to 8 hours, or 250 mg. every 12 hours may be necessary.

Serum levels obtained by the recommended dosages are comparable to those provided by the oral dosage of 1 to 2 Gm. daily in adults. Antibiotic therapy should be continued for at least 24 to 48 hours after all symptoms and fever have subsided.

In certain diseases specific courses of therapy may be recommended as a general guide. In primary and secondary syphilis for example, the daily administration of 2 Gm. oxytetracycline, orally, in divided doses for two weeks has given good results. In cases of gonococcal infection two intramuscular injections of 250 mg. each, or one intramuscular injection of 250 mg. combined with one gram given orally as a single dose, will usually suffice, but repetition of this therapy will be required in an occasional case.

In the treatment of hemolytic streptococcal infections, therapy should continue for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

In the treatment of staphylococcal infections indicated surgical procedures should be carried out in all cases.

Pediatric: A dosage of 3 mg./lb./day in two doses has been found satisfactory in the treatment of most mild to moderately severe infections. For more severe infections, higher dosages may be indicated and should be adjusted accordingly.

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Florida Medical meetings

FMA Approved Postgraduate Meetings

OCTOBER

4 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

8-11 Coronary Care and Continuing Medical Education in the Community Hospitals and Environs, San Carlos Hotel and Municipal Auditorium, Pensacola

16-18 Neurology-Neurosurgery Seminar, University of Florida College of Medicine, Gainesville

18 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

23-26 Seventh Annual Cardiology Seminar, Tides Bath Club, Redington Beach

25 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

NOVEMBER

6- 7 Seminar on Obstetrics and Gynecology, J. Hillis Miller Health Center, Gainesville

7- 8 ENT for the Family Practitioner, University of Miami School of Medicine, Miami

8 Pediatric Seminar on "Common Pediatric Problems," University of Florida College of Medicine, Gainesville

12-15 Today's Hospital Problems: An Interdisciplinary Approach Third Conference, Tides Hotel and Bath Club, St. Petersburg

DECEMBER

4- 6 Emergency Care and Transportation of the Sick and Injured, American Academy of Orthopaedic Surgeons, Bayfront Park Auditorium, Miami

12-14 Neuromuscular Skeletal Disorders: Current Concepts in Surgery and Rehabilitation, Americana Hotel, Miami Beach

15-17 The Dysvascular Amputee: Surgical and Prosthetic Management, Americana Hotel, Miami Beach

JANUARY

8-11 Advances in Respiratory Care and Physiology, Eden Roc Hotel, Miami Beach

National and Regional Meetings in Florida

1969

DECEMBER

6-11 American Academy of Dermatology, Americana Hotel, Miami Beach

1970

JANUARY

8-11 Respiration and Respiratory Care-Advances in Respiratory Care and Physiology, Eden Roc Hotel, Miami Beach

MARCH

14-18 American Society of Abdominal Surgeons Clinical Congress, Deauville Hotel, Miami Beach

19-24 American Dermatological Association, Boca Raton Hotel, Boca Raton

APRIL

12-16 American Proctologic Society, Diplomat Hotel, Hollywood

19-20 American Otological Society, Hollywood Beach Hotel, Hollywood

20-21 American Broncho-Esophagological Association, Hollywood Beach Hotel, Hollywood

21-23 American Laryngological, Rhinological and Otological Society, Hollywood Beach Hotel, Hollywood

23-24 American Society for Head and Neck Surgery, Hollywood Beach Hotel, Hollywood

24-25 American Laryngological Association, Hollywood Beach Hotel, Hollywood

24-25 American Academy of Facial Plastic and Reconstructive Surgery, Hollywood Beach Hotel, Hollywood Beach

27-May 2 American Academy of Neurology, Americana Hotel, Miami Beach

SEPTEMBER

29-Oct. 2 American Roentgen Ray Society, Deauville Hotel, Miami Beach

OCTOBER

2- 4 Southeastern Allergy Association, Colony Beach Club Hotel, Long Boat Key, Sarasota

NOVEMBER

3- 8 American Society of Clinical Hypnosis, Eden Roc Hotel, Miami Beach

17-22 Pan American Medical Association, Hollywood Beach Hotel, Hollywood

DECEMBER

7-10 Southern Surgical Association, Boca Raton Hotel, Boca Raton



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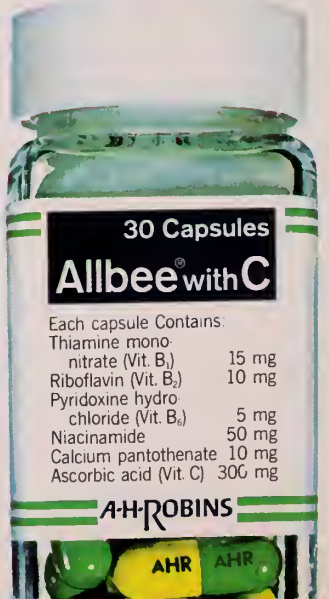
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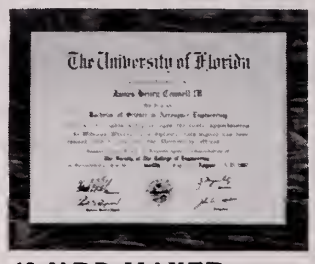
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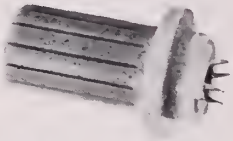
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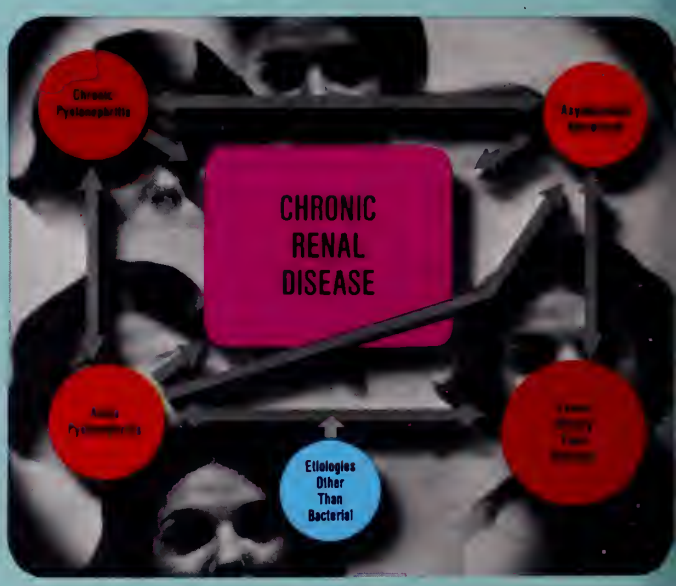
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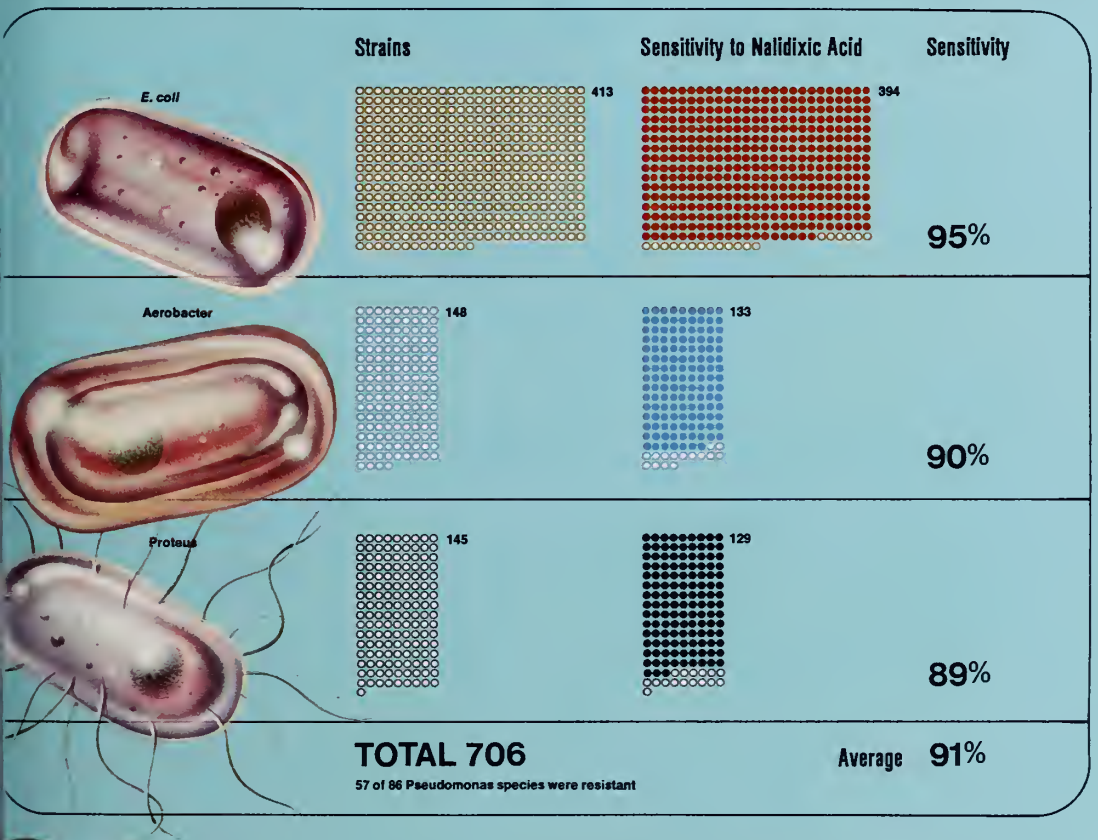
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References: 1. Reimann-Hunziker, R. and Reimann-Hunziker, G. J.: *Praxis* 53:15, Jan. 9, 1964. 2. Sanford, J. P.: *Med. Times* 96:715, July 1968. 3. Reese, L.: *Canad. M. A. J.* 92:394-397, Feb. 20, 1965.

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Summary of prescribing information

Indications: Urinary tract infections in which species of sensitive gram-negative bacteria are predominant, particularly *Proteus, Escherichia coli, Aerobacter, Klebsiella,* and certain strains of *Pseudomonas.* Gram-positive bacteria are less sensitive to Cybis but favorable clinical results have been observed.

Warning: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

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During treatment microorganisms may develop resistance to this drug. Resistant bacteria, not previously present or identified, may emerge. Cultures should be taken and bacterial sensitivity tests made periodically, particularly if the clinical response is unsatisfactory or if a relapse occurs. Should resistance develop, other specific chemotherapy should be instituted; no cross resistance has been observed. If new strains of bacteria that are not sensitive emerge, other effective antibacterial agents may be added. When Benedict's or Fehling's solutions or Clinitest® Reagent Tablets are used to test the urine of patients taking Cybis, a false-positive reaction for glucose may be obtained due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (using, for example, Clinistix® Reagent Strips or Tes-Tape®) does not give a false-positive reaction to Cybis glucuronide.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances: less frequently, sleepiness, drowsiness, weakness, headache, dizziness and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed surfaces, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache have been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the latter generally in patients with possible predisposi factors, and both usually associated with excessive dosage) have been recorded in rare instances.

Dosage and administration: *Adults*—Four Gm. c by mouth (2 tablets of 500 mg. four times daily) for to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. c (1 tablet of 500 mg. four times daily). *Children*— According to age and weight: approximately *25 mg per pound* of body weight per day, administered in divided doses.

Note: The dosage recommended above for adults children should not arbitrarily be doubled unless u the careful supervision of a physician. Until further experience is gained, infants under 1 month should be treated with the drug.

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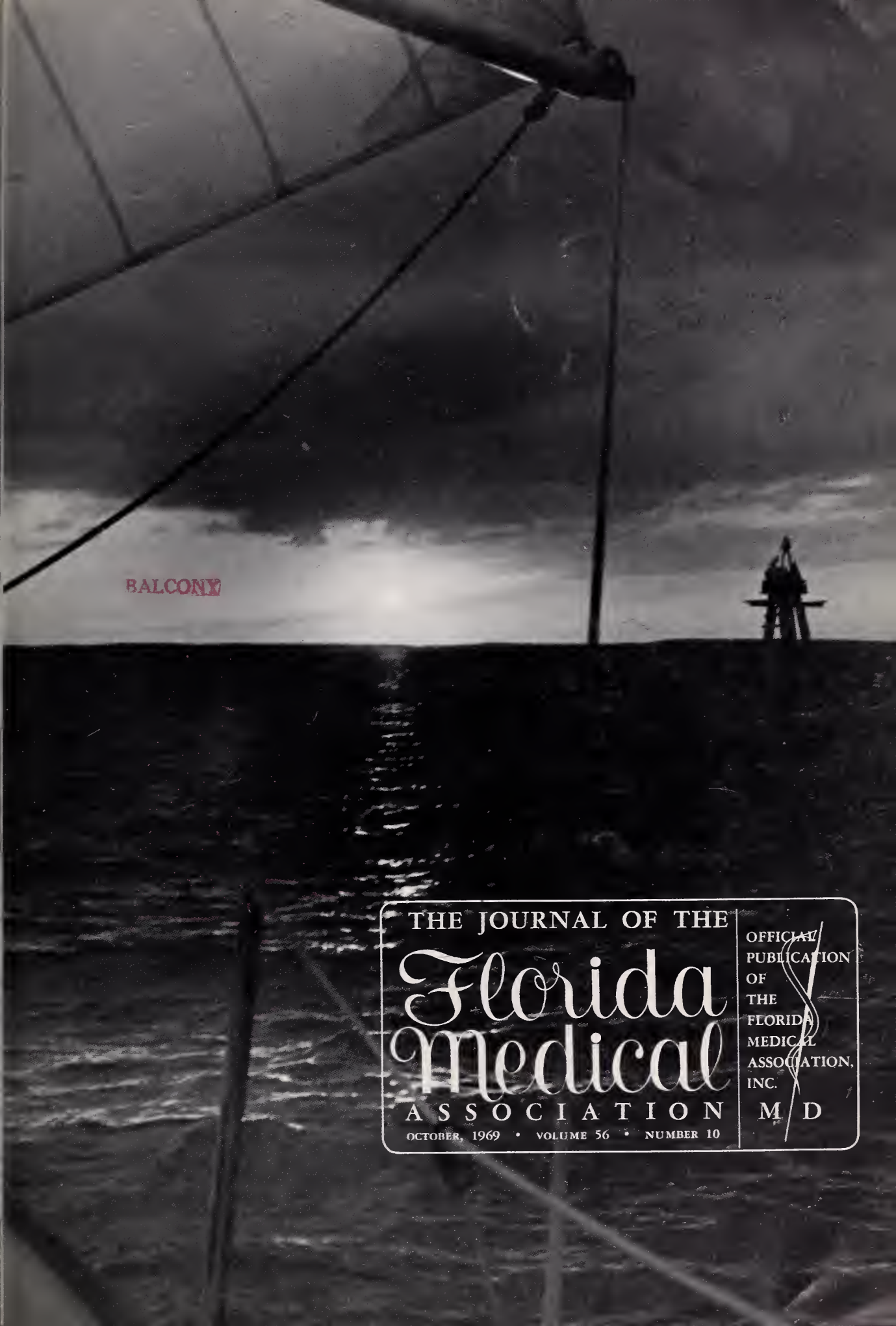
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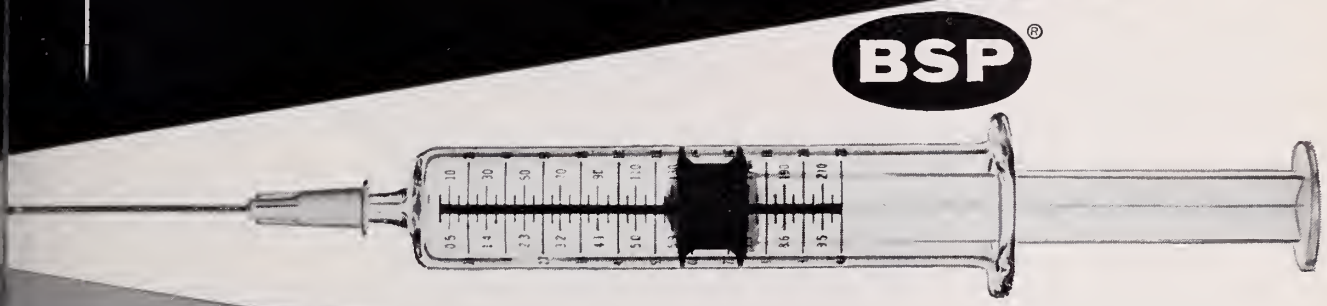
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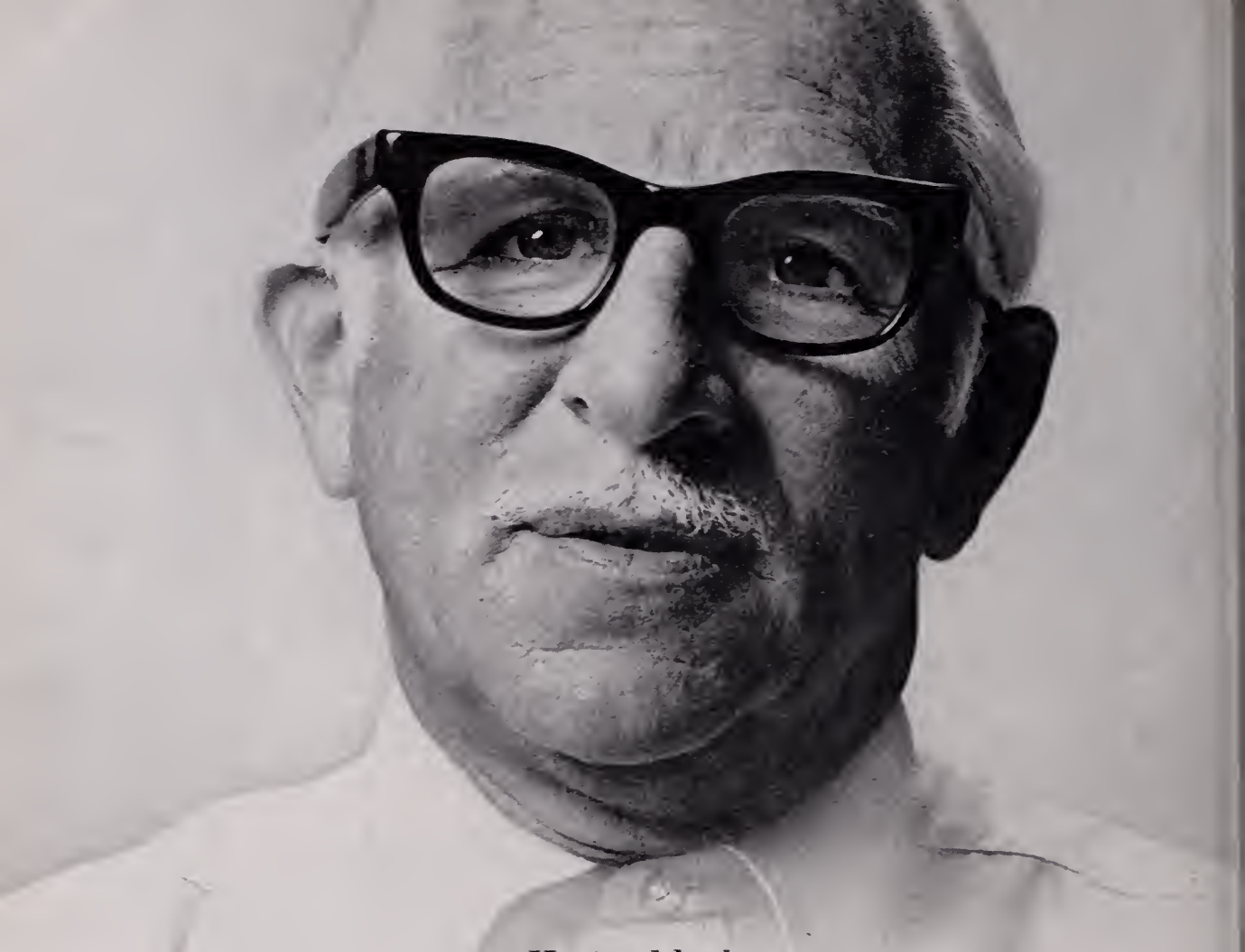
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Precautions: Overgrowth of nonsusceptible organisms may occur. C stant observation is essential. If new infections appear, appropr measures should be taken. In infants, increased intracranial pres with bulging fontanels has been observed. All signs and symptoms h disappeared rapidly upon cessation of treatment.

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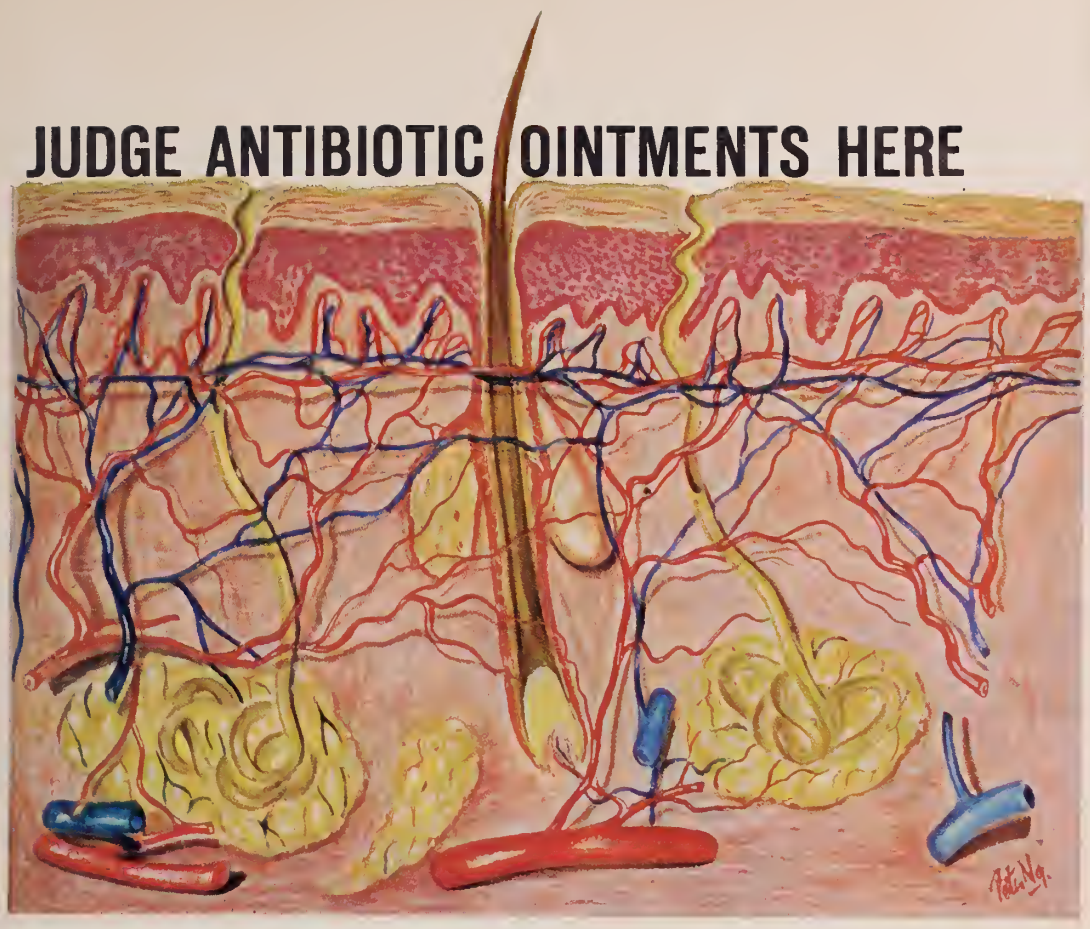
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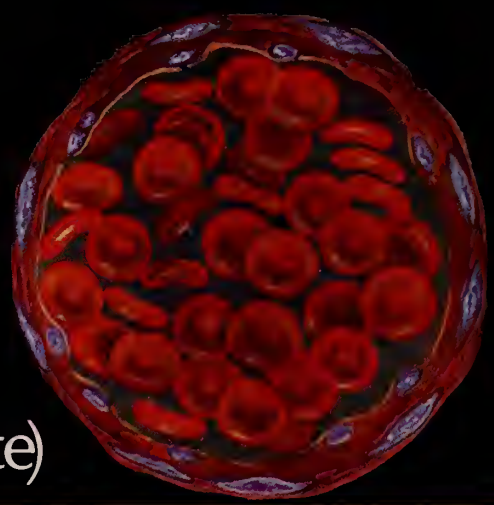
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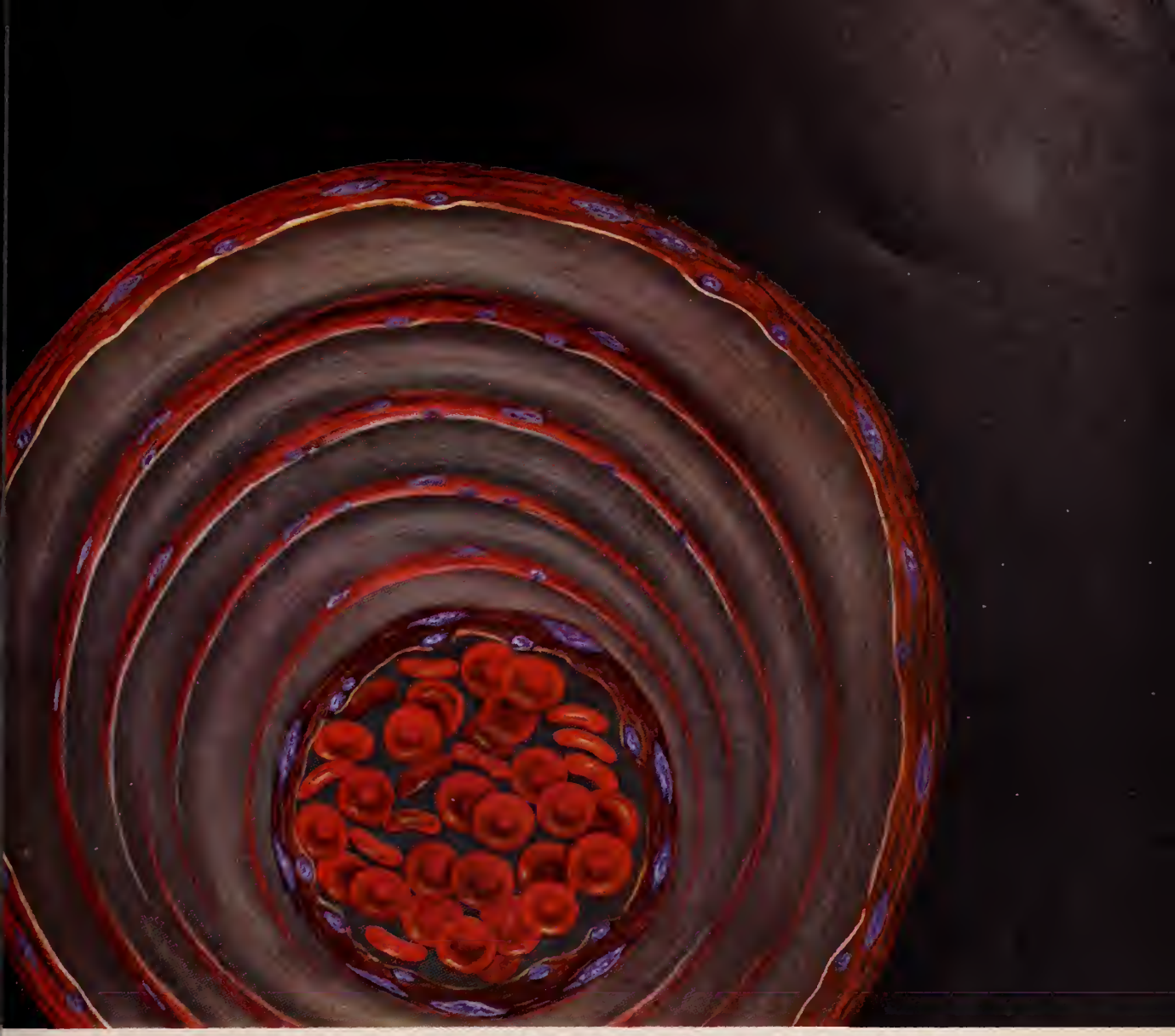
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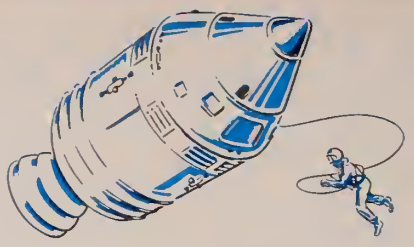
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Warning. Activation of psychosis may occasionally be observed in schizophrenic patients. Due to atropine-like effects and sympathomimetic potentiation, use only with the greatest care in patients with narrow-angle glaucoma or urethral or ureteral spasm.

Do not use in patients with the following conditions unless the need outweighs the risk: severe coronary heart disease with EKG abnormalities, progressive heart failure, angina pectoris, paroxysmal tachycardia and active seizure disorder (may lower seizure threshold).

Desipramine and the parent compound, imipramine, have been shown to block the action of guanethidine and related adrenergic neuron-blocking agents.

Hypertensive episodes have been observed during surgery.

The concurrent use of other central nervous system drugs or alcohol may potentiate adverse effects. Since many such drugs may be used during surgery, desipramine should be discontinued prior to elective procedures.

Caution patients on the possibility of impaired ability to operate a motor vehicle or dangerous machinery.

Do not use in women who are or may become pregnant unless the clinical situation warrants the potential risk, and do not use in patients under 12 years of age.

Because of increased sensitivity to the drug, use lower than normal dosage in adolescent and geriatric patients.

Precautions. Potentially suicidal patients require careful supervision and protective measures during therapy. Discontinuation of the drug may be necessary in the presence of increased agitation and anxiety shifting to hypomanic or manic excitement.

Atropine-like effects may be more pronounced (e.g., paralytic ileus) in susceptible patients and in those receiving anticholinergic drugs (including antiparkinsonism agents).

Prescribe cautiously in hyperthyroid patients and in those receiving thyroid medications; transient cardiac arrhythmias have occurred in rare instances.

Periodic blood and liver studies should supplement careful clinical observations in all patients undergoing extended courses of therapy.

Adverse Reactions. The following have been reported: *Nervous System*: dizziness, drowsiness, insomnia, headache, disturbed visual accommodation, tremor, unsteadiness, tinnitus, paresthesias, changes in EEG patterns, epileptiform seizures, mild extrapyramidal activity, falling and neuromuscular incoordination. A confusional state (with such symptoms as hallucinations and disorientation), particularly in older patients and at higher dosage, may require discontinuation of the drug. *Gastrointestinal Tract*: anorexia, dryness of the mouth, nausea, epigastric distress, constipation and diarrhea. *Skin*: skin rashes (including photosensitization), perspiration and flushing sensations. *Liver*: rare cases of transient jaundice (apparently of an obstructive nature) and liver damage. If jaundice or abnormalities in liver function tests occur, discontinue the drug and investigate. *Blood Elements*: bone-marrow depression, agranulocytosis, thrombocytopenia and purpura. If these occur, discontinue the drug. Transient eosinophilia has been observed. *Cardiovascular System*: orthostatic hypotension and tachycardia. Carefully supervise patients requiring concomitant vasodilating therapy, particularly during initial phases. *Genitourinary System*: urinary frequency or retention and impotence. *Endocrine System*: occasional hormonal effects including gynecomastia, galactorrhea and breast enlargement and decreased libido and estrogenic effect. *Sensitivity*: urticaria and rare instances of drug fever and cross-sensitivity with imipramine.

Dosage. All patients except geriatric and adolescent: 50 mg. t.i.d. (150 mg. daily). Dosage may be increased up to 200 mg. daily. Geriatric and adolescent patients should usually be started with lower dosage (25 to 50 mg. daily) and may not tolerate higher doses. Dosage may be increased up to 100 mg. daily.

Lower maintenance dosages should be continued for at least 2 months after obtaining a satisfactory response.

Mild anxiety and agitation which may accompany depression usually remit as the depression responds. Occasionally, however, a sedative or tranquilizer may be indicated.

Availability. Maroon and pink capsules of 50 mg. in bottles of 100; pink capsules of 25 mg. in bottles of 100 and 1000. TB146-530-G

For complete details, please see the full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

geigy

It's beautiful!





Student Loans

Printed below is a letter sent me by the Student American Medical Association, signed by Mr. Peter Andrus (University of Pennsylvania), Regional Vice President, Student American Medical Association. Student loan funds in the health professions have been extensively utilized when available.

We have a loan program financed through our Florida Medical Foundation which will help medical students and house staff physicians, but we hope for more contributions for scholarship and loan funds. The letter printed below is in relation to federal low-interest loan programs and I think we should support the SAMA in this matter. Let us know your reactions.

Dear Doctor Babers:

I am taking this opportunity to advise you of the action taken by the Student American Medical Association regarding the Health Professions Student Loan Program budgetary cutbacks presently being considered by the Senate and to request the support of the Florida Medical Association of our position on this matter.

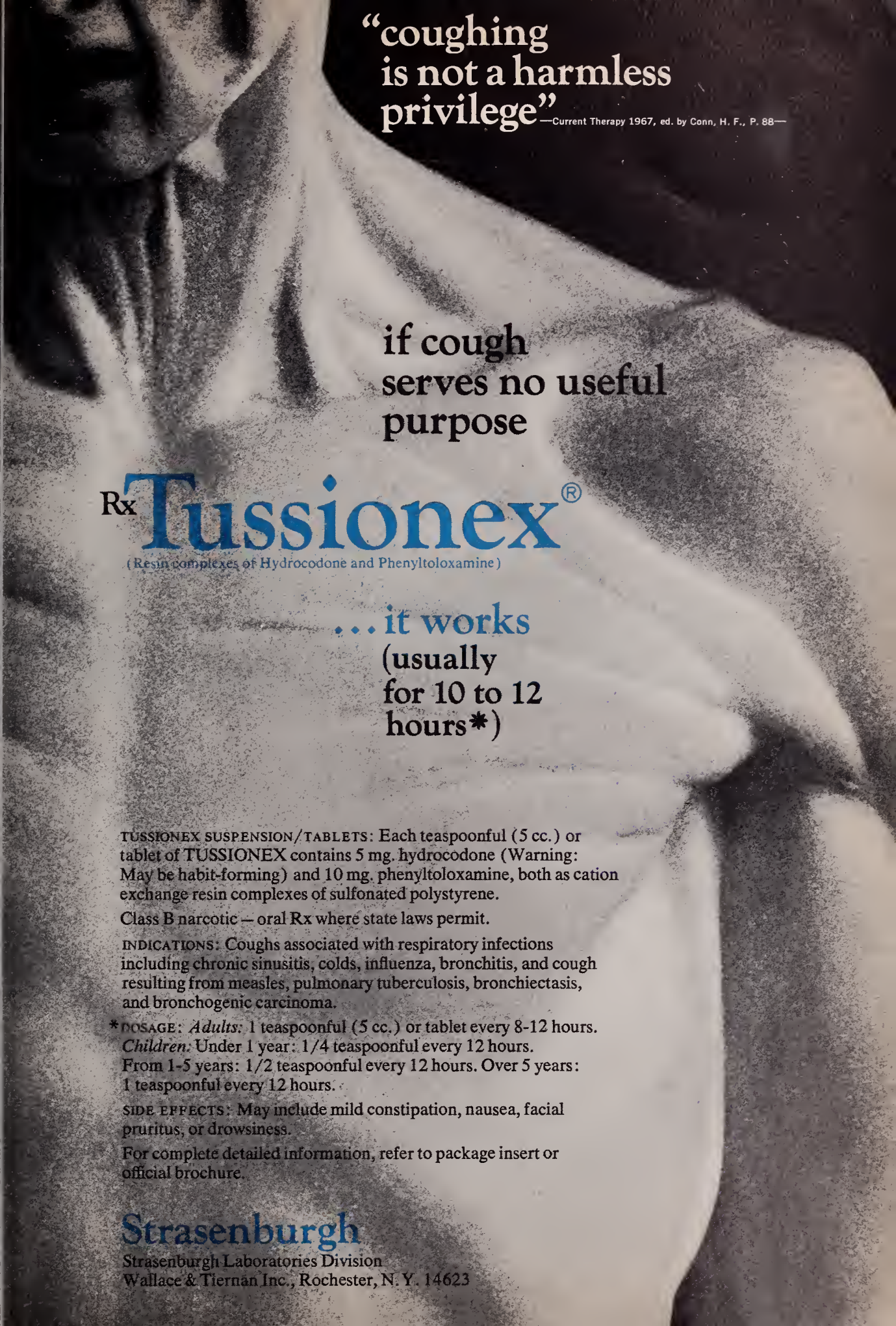
The Health Professions Student Loan Program provided 26 million dollars last year for the financial assistance of the students of medicine, dentistry, osteopathy, optometry, pharmacy, podiatry and veterinary medicine. Of this total medical schools received more than 14 million dollars. This year the Administration's proposal calls for a 40 per cent cutback in the funding of this program so that only some 16 million dollars will be available, in spite of increased requests for funding by schools and increased enrollments in medical schools and other health professions schools, including large numbers of students from disadvantaged and minority backgrounds.

The House of Representatives recently voted to accept the Administrations proposal for these decreases. The bill, H.R. 13111, containing appropriations for the departments of Labor and Health, Education, and Welfare is currently being considered by the Senate. This represents our last opportunity to effect a positive change in the legislation. The Student American Medical Association has previously testified in support of increases in the funding for this program before the House Appropriations Committee and has requested the opportunity to do likewise before the Senate Appropriations Subcommittee. In addition, we have been actively engaged in visiting the congressmen and senators from every state to obtain their support. The American Medical Association has strongly endorsed our stand on this issue. In a recent resolution passed by the House of Delegates in New York, the AMA stated its position that "student loans should be increased in accord with identified need, keeping particularly in view of the efforts of schools to accept students from disadvantaged backgrounds. Even the maintenance of existing student enrollments will be difficult and much more so their expansion if student aid is not forthcoming in amounts related to need." Thus, at this juncture, we urgently solicit your support. Through letters of support for our stand, and through personal meetings with your state's senators, you and the Florida Medical Association will be able to contribute greatly to the success of our efforts on this issue.

We will look forward to your cooperation with us and would appreciate being advised of your efforts on our behalf in order to effectively coordinate these efforts in our campaign to restore funding for this very important program.

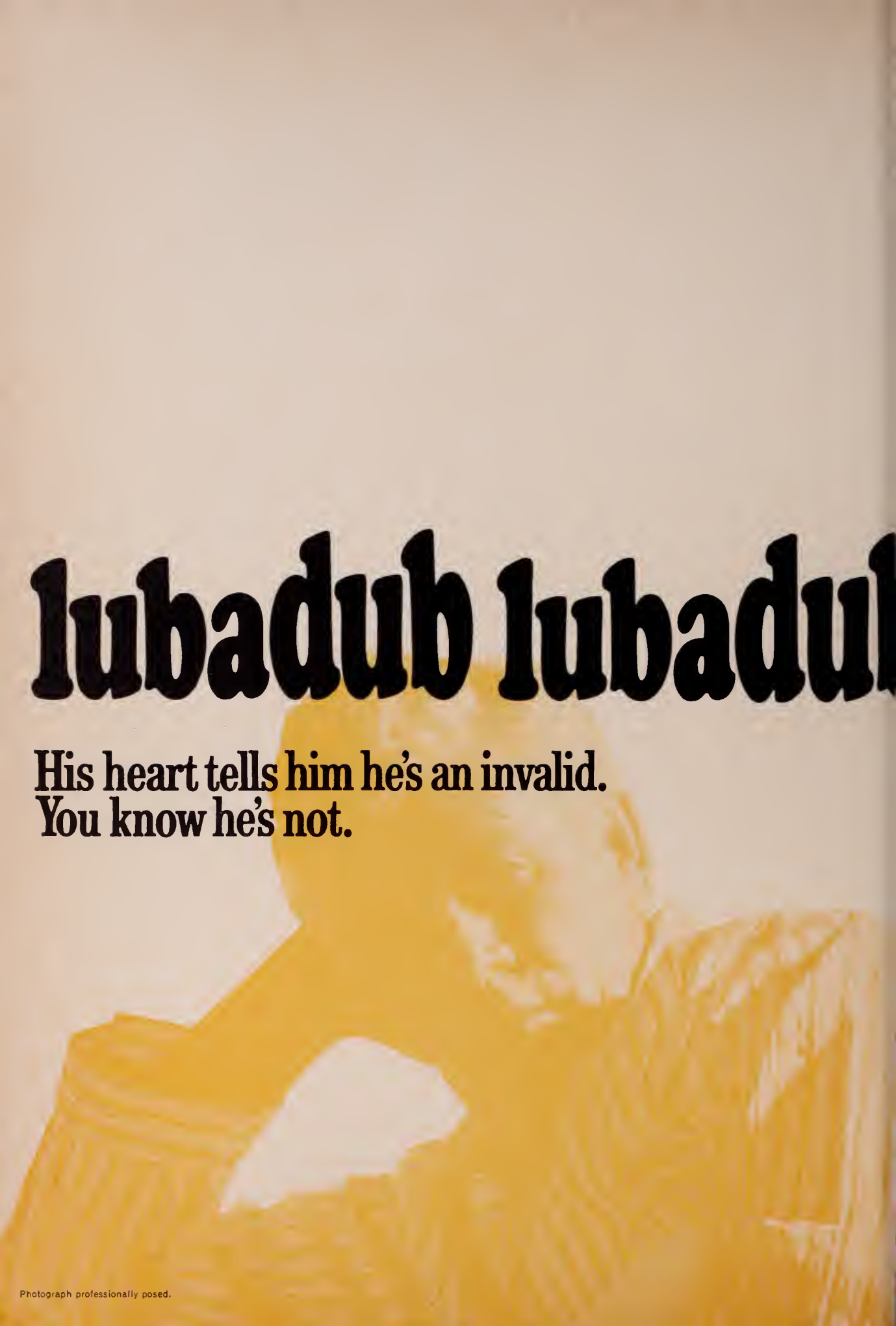
Peter L. Andrus

Henry J. Babers Jr.


"coughing is not a harmless privilege"—Current Therapy 1967, ed. by Conn, H. F., P. 88—
if cough serves no useful purpose
Rx Tussionex®
(Resin complexes of Hydrocodone and Phenyltoloxamine)
...it works (usually for 10 to 12 hours*)
TUSSIONEX SUSPENSION/TABLETS: Each teaspoonful (5 cc.) or tablet of TUSSIONEX contains 5 mg. hydrocodone (Warning: May be habit-forming) and 10 mg. phenyltoloxamine, both as cation exchange resin complexes of sulfonated polystyrene.
Class B narcotic — oral Rx where state laws permit.
INDICATIONS: Coughs associated with respiratory infections including chronic sinusitis, colds, influenza, bronchitis, and cough resulting from measles, pulmonary tuberculosis, bronchiectasis, and bronchogenic carcinoma.
*DOSAGE: *Adults:* 1 teaspoonful (5 cc.) or tablet every 8-12 hours. *Children:* Under 1 year: 1/4 teaspoonful every 12 hours. From 1-5 years: 1/2 teaspoonful every 12 hours. Over 5 years: 1 teaspoonful every 12 hours.
SIDE EFFECTS: May include mild constipation, nausea, facial pruritus, or drowsiness.
For complete detailed information, refer to package insert or official brochure.
Strasenburgh
Strasenburgh Laboratories Division
Wallace & Tiernan Inc., Rochester, N. Y. 14623

lubadub lubadub

His heart tells him he's an invalid.
You know he's not.



Photograph professionally posed.

Contraindications: History of sensitivity to meprobamate.

Important Precautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use has been reported to result in dependence or habituation in susceptible persons, as alcoholics, ex-addicts, and other severe psychoneurotics. After prolonged excessive dosage, reduce dosage gradually to avoid possibly severe withdrawal reactions. Abrupt discontinuance of excessive doses has sometimes resulted in epileptiform seizures.

Warn patients of possible reduced alcohol tolerance, with resultant slowing of reaction time and impairment of judgment and coordination.

Reduce dose if drowsiness, ataxia or visual disturbance occurs; if persistent, patients should not operate vehicles or dangerous machinery.

Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis,

ıbadubdub lubadı

ıxiety is expected in the cardiovascular patient.
little may even be desirable.

t when anxiety is exaggerated . . . when it
erferes with sleep . . . when it aggravates
rdiovascular symptoms, your help may
needed.

ıturally, you'll want to reassure the patient.

ıd perhaps prescribe Equanil (meprobamate)
adjunctive therapy. It helps relieve anxiety
d tension specifically, yet gently.

most 15 years' use has shown that Equanil
usually well tolerated as well as effective.
de effects are generally limited to transient
owsiness; serious, therapy-interrupting
de effects are rare.

stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia, usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

Equanil®
(meprobamate) Wyeth®



No place for beginners

Terramycin®
(oxytetracycline)

An infection of rapid onset requiring prompt attention. Teenage girl with chills, fever, abdominal pain, backache and nausea. Frequent and urgent urination with burning. On examination—tenderness over kidney. Blood count and urinalysis confirm the diagnosis: acute pyelonephritis. Treatment is initiated with Terramycin. Within a few days of follow-up therapy, the patient is markedly improved. The pretreatment urine culture shows a strain of *E. coli* highly susceptible to Terramycin.

Experience has shown that Terramycin offers special advantages in treating urinary tract infections when strains of causative bacteria are susceptible. Broad-spectrum coverage unaffected by penicillinase. Effective tissue levels to help reach foci of infection in renal parenchyma. High urine levels—excreted by kidney in *active* form.

With Terramycin, you have the assurance that comes with choosing an agent physicians have depended on for over 18 years. In difficult as well as routine cases, when tests reveal susceptible organisms, consider Terramycin. One of the world's most widely used broad-spectrums.

Contraindicated: In individuals hypersensitive to oxytetracycline.

Warnings: Reduce usual oral dosage and consider antibiotic serum level determinations in patients with impaired renal function.

Use of oxytetracycline during the last trimester of pregnancy, neonatal period and early childhood may cause discoloration of developing teeth. This effect occurs mostly during long-term use of the drug, but it has also been observed in usual short-treatment courses.

During treatment with tetracyclines, individuals susceptible to photodynamic reactions should avoid direct sunlight; if such reactions occur, discontinue therapy.

Note: With oxytetracycline, phototoxicity is unknown and photoallergy very rare.

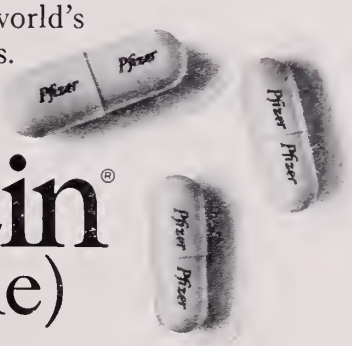
Precautions: Use of broad-spectrum antibiotics occasionally may result in overgrowth of nonsusceptible organisms. Where such infections occur, discontinue oxytetracycline and institute specific therapy. Increased intracranial pressure in infants is a possibility. Symptoms disappear upon discontinuation of therapy.

Adverse Reactions: Nausea, diarrhea, glossitis, stomatitis, proctitis, vaginitis and dermatitis, as well as reactions of an allergic nature, may occur but are rare.

Supply:* Terramycin Capsules: oxytetracycline HCl, 250 mg. and 125 mg. Terramycin Syrup: calcium oxytetracycline, 125 mg. per 5 cc. Terramycin Pediatric Drops: calcium oxytetracycline, 100 mg. per cc.

*All potencies listed are in terms of the standard, oxytetracycline.

More detailed professional information available on request.



Terramycin®
(oxytetracycline)

Pfizer LABORATORIES DIVISION
New York, N.Y. 10017

For elderly patients
in need of a mild tranquilizer
consider **Tybatran**®
brand of tybamate

(When you consult
the Prescribing Informatio
you may agree
it makes good sense)



RESCRIBING INFORMATION

Indications: Tybatran (tybamate) has afforded symptomatic improvement in a variety of psychoneurotic disorders, especially in the treatment of the anxiety and tension components of psychoneuroses. Anxiety states manifested somatically have responded to Tybatran (tybamate).

Tybatran (tybamate) has been useful in the control of agitation in the aged and in the alleviation of some of the adverse emotional accompaniments of senility.

Tybatran (tybamate) has been used with benefit in the treatment of depressive symptoms associated with anxiety and other symptoms of psychoneuroses. However, it is not indicated for primary treatment of depressive states. It is not an antipsychotic agent, although it has been used as adjunctive therapy in some psychotic patients.

Dosage: One 350 mg. capsule, 3 times daily and two at bedtime is suggested as the adult starting dose. Adjust to suit individual requirements. Daily doses above 3000 mg. are not recommended.

Contraindications: Known hypersensitivity to tybamate. Since no studies have been done with this drug in human pregnancy, it should not be used in pregnancy unless the potential benefit outweighs the risk.

Warnings: Administer cautiously to patients receiving phenothiazines or other CNS depressants or having history of convulsive seizures (See Adverse Reactions). Consider possibility of additive actions with alcohol or other psychotropic agents, particularly phenothiazines or MAO inhibitors.

Precautions: Avoid abrupt withdrawal after prolonged use, although withdrawal symptoms have not been reported to date. Exercise caution in addiction-prone individuals. If symptoms of hypersensitivity occur, discontinue at once and initiate appropriate symptomatic treatment. Avoid activities requiring optimal mental alertness if drowsiness or vertigo are present. As with any new drug, use cautiously in patients with history of drug allergies, blood dyscrasias, and hepatic or renal disease; periodic measurements of hepatic, hematopoietic and renal function should accompany prolonged and/or high doses.

Adverse Reactions: Most frequent reactions, rarely requiring discontinuation of tybamate, include drowsiness, dizziness, nausea, insomnia, and euphoria. There have been a few reports of skin rash, urticaria, and pruritus. Rare side effects include hyperactivity, fidgetiness, flushing, and tachycardia, suggesting excessive stimulation; also ataxia, unsteadiness, confusion, feeling of unreality, "panic reaction," fatigue, headache, paresthesias, vertigo, gastrointestinal disturbances, glossitis, and dry mouth. Grand mal or petit mal seizures have been reported in a few hospitalized psychotic patients receiving tybamate (up to 6000 mg. daily) together with phenothiazines and other psychotropic agents, but not with tybamate alone. Consider the possibility of rare, serious adverse reactions such as may occur with the related drug, meprobamate. If excessive amounts are ingested, gastric lavage and symptomatic therapy, including central stimulants as necessary, are recommended. Before prescribing, consult package circular.

Supply: Tybatran (tybamate) is available in green, sealed capsules of three strengths: 350 mg., 250 mg., and 125 mg. Each strength is supplied in bottles of 100 and 500.

A. H. Robins Company, Richmond, Va. 23220

A·H·ROBINS



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A radical advance in otoscope design, the Hotchkiss employs the principles of modern optics to give you a brighter, clearer, more informative view of the ear canal and tympanic membrane. It weighs just five ounces (including batteries) and fits into your shirt or jacket pocket. You can carry it anywhere; use it repeatedly without fatigue. And the Hotchkiss is built to stand up to far rougher treatment than you're likely to give it.

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No injection after all!

This penicillin produces high, fast levels—orally.

Pen•Vee® K is usually so rapidly and completely absorbed that therapeutic penicillin levels are attained within 15 to 30 minutes. Thus it can often obviate the need for penicillin injections. The higher serum levels produced generally last longer than with those of oral penicillin G.

Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.
Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.
Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.
Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.
Adverse Reactions: (Penicillin has significant index of sensitization): Skin rashes, ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; serum sickness-like reactions, including chills, fever, edema, arthralgia and prostration. Severe and often fatal anaphylaxis has been reported (see "Warnings").
Composition: Tablets—125 mg. (200,000 units), 250 mg. (400,000 units), 500 mg. (800,000 units); Liquid—125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc.

Wyeth Laboratories Philadelphia, Pa.

ORAL **PEN•VEE® K**

(potassium phenoxymethyl penicillin) Wyeth®

The first Medihaler was developed for the physician-inventor's own child.

ıe improved model you prescribe today is still made with the same painstaking devotion.

When your patient is in the grip of bronchospasm and reaches for his Medihaler, it must work. Not sometimes. Not most of the time. *Always.*

This is the ideal of perfection which has motivated the constant process of improvement of Riker's Medihaler.

Since its invention in 1956—when a Riker physician developed the Medihaler because of his determination to make better treatment available for his own asthmatic child—Riker has pioneered just about every significant forward step in bronchodilator aerosol therapy.

Riker developed the precision Medihaler valve, which assures the delivery of an automatically measured dose each and every time.

Riker was first to formulate medication in a non-irritating, non-alcoholic vehicle.

Riker pioneered pre-grinding of the medication to 1-5 micron size, assuring maximum distribution to the distal bronchioles for greater topical effectiveness with less systemic action. (Oddly, even today not all competitors have adopted these two advances.)

Add to these advantages a quality control system involving 168 physical measurements and chemical tests, plus not one but two test firings on every single unit leaving the plant, and you can readily see why there is no more dependable relief for bronchospasm than your prescription for Duo-Medihaler or Medihaler-Iso.

Please see next page for complete prescribing information.

Medihaler-Iso®
(isoproterenol sulfate)



Duo-Medihaler®
isoproterenol HCl (4mg./cc.)
phenylephrine bitartrate (6mg./cc.)

Riker Laboratories, Northridge, California 91324

The Riker Representatives in your area are:
Harold Hoblick, Guy Colon, Jim Crozier, Walt Crow, Rick Giteles, Billy Phillips

SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

Caution: Federal law prohibits dispensing without prescription.

Riker Laboratories Northridge, Calif. 91324

St. Francis Hospital
4th Annual
Medical-Surgical Seminar

St. Francis Hospital Auditorium,
Miami Beach, Florida

Nov. 5, 1969
1 to 5 P.M. & 7:30 to 10 P.M.

Nov. 6, 1969
9:00 A.M. to 12:00 noon

"CLINICAL MANAGEMENT OF FLUID and ELECTROLYTE DISORDERS"

NEAL S. BRICKER, M.D.
Professor and Head, Renal Division, Department of Medicine, Washington University School of Medicine, St. Louis, Missouri.

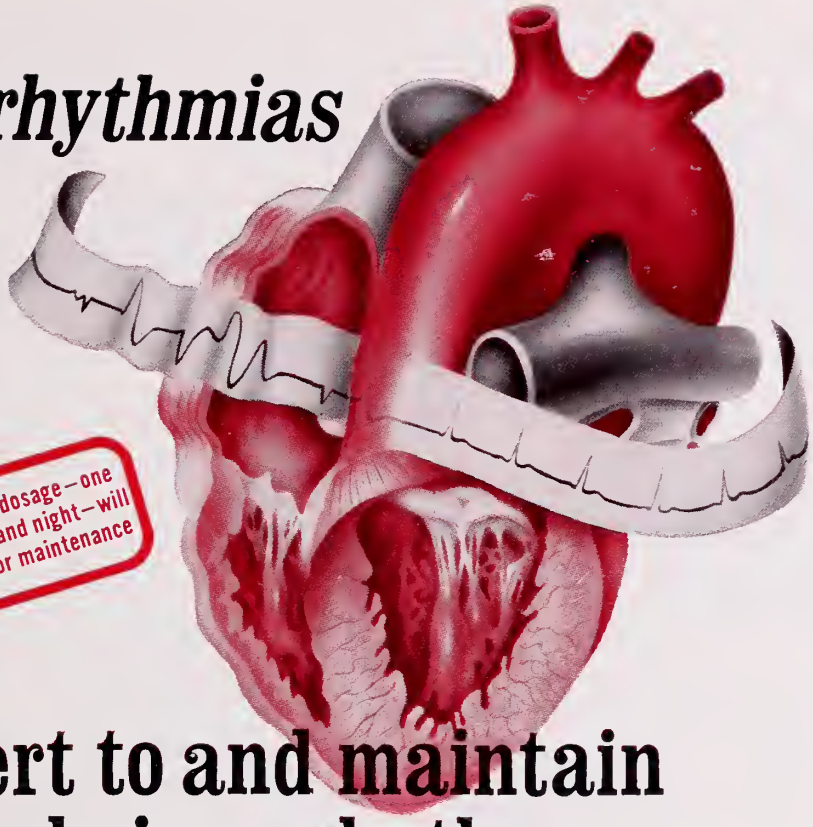
SOLOMON PAPPER, M.D.
Professor and Co-Chairman, Department of Medicine, University of Miami School of Medicine. Chief, Medical Service, Veterans Administration Hospital, Miami, Fla.

WILLIAM B. SCHWARTZ, M.D.
Professor of Medicine, Tufts University School of Medicine. Chief, Renal Division, New England Center Hospital, Boston, Massachusetts.

RONALD SHANE, M.D.
Assistant Professor, Department of Medicine, University of Miami School of Medicine, Miami, Florida.

NO REGISTRATION FEE. ALL INTERESTED PHYSICIANS ARE INVITED TO ATTEND.

in arrhythmias



generally B.I.D. dosage—one tablet morning and night—will be adequate for maintenance

convert to and maintain normal sinus rhythm

CARDIOQUIN TABLETS
QUINIDINE POLYGALACTURONATE

- A better-tolerated quinidine molecule—lower incidence of local G.I. irritation than with quinidine sulfate
- Many patients, unable to tolerate quinidine sulfate, may be converted to normal sinus rhythm with quinidine polygalacturonate
- Indicated for both conversion and maintenance
- Flexible dosage permits the physician to retain control of conversion by dosage adjustment when necessary

BRIEF SUMMARY—INDICATIONS: Prevention and termination of atrial fibrillation, atrial flutter, atrial premature contractions, paroxysmal atrial tachycardia, paroxysmal ventricular tachycardia, premature ventricular contractions. CONTRAINDICATIONS: 1) Absolute: Complete atrioventricular heart block or history of previous sensitivity reactions. 2) Relative: Partial a-v and bundle branch block, severe cardiac failure and hypertrophy, chronic valvular disease, subacute bacterial endocarditis, acute infection, advanced age. PRECAUTIONS: The same as with all quinidine salts. Frequent ECG recommended; discontinue drug if ECG shows conduction system defects. Decrease dosage if signs of cinchonism develop. Initial therapeutic dose should be used as test dose for possible hypersensitivity. COMPOSITION: Each CARDIOQUIN Tablet (quinidine polygalacturonate 275 mg.) is equivalent in quinidine content to 3 grains quinidine sulfate. DOSAGE AND ADMINISTRATION: See PDR, p. 997. Detailed information and references available to physicians on request.

Purdue Frederick The Purdue Frederick Company, Yonkers, New York 10701

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Erythromycin Estolate

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Additional information available upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

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Florida Medical | scientific

Newborn Special Care Comes of Age

Louis Gluck, M.D.

The present decade continues to witness many changes in thinking which relate to medical care delivered to newborn and other young infants. Among the most significant and provocative is the philosophy regarding the desirability of combining infant services and changing nursery design to accompany changes in care. In particular, newborn intensive care or special care units are being established in many medical centers for the purpose of delivering in one central area the most advanced kind of observation and care possible. Premature nurseries, as presently known, are obsolete.

Prior to this yet-evolving renaissance, it was disconcerting to many physicians concerned with the newborn infant that care was being delivered piecemeal and poorly by fragmentations and duplication of efforts in many areas of the standard conventional hospital. Furthermore, failure to consider adequately the needs of full-term infants appeared to be almost universal; nearly all intensive care was being provided to premature infants, who in toto are a "mixed bag." There was failure to recognize that differences in the problems of full-term infants and so-called "premature" infants were of degree only—a continuum of problems across the board of infants newly born, whether before time or at time. The results were odd and artificial separations of care into separate premature nurseries, infant areas in pediatric wards and isolation rooms, producing an insurmountable problem at the moment; namely, the dire shortage of competent, adequately trained personnel.

Until recently, various public health luminaries, including individuals instrumental in setting policy in the American Academy of Pediatrics, certainly well meaning, refused unfortunately to witness about them the shortages of persons entering the fields of nursing; shortages that were cumulative, resulting in hazardous and in some areas utterly disastrous understaffing problems. Their widespread edicts, that services to the newborn infant must be fragmented in various parts of the hospital, helped to produce one of the understaffing difficulties in that each separation, isolation and fragmentation required more and more personnel.

Several experiments from coast to coast have suggested the advisability of giving special care to all newborn infants requiring it; that it is certainly safe to mix infants of varying gestational ages and differing sizes, and that personnel shortages can be overcome in large part by combining and centralizing infant services. Although definitive experiments are lacking, stating unequivocally in statistical fashion that intensive care is better than traditional care, I do think it is safe to assume that the upgrading of medical care delivered to the infant is and will be shown to be a good thing for the infant.

One can only hope that proper advantage will be taken of regional medical planning in the various areas throughout the country, including Florida, for help in setting up adequate referral centers for the care of infants with unusual problems. Furthermore the overall plan should provide assistance to every hospital so that care for infants can be upgraded and training programs established to provide necessary nursing cadres. It is hoped that intensive care in the larger centers throughout the country will not be relegated, as is now done in many medical centers, to the care of infants confined to respirators. This would continue the care of newborn infants in the modern dark ages from which I hope we are now emerging.

It is further hoped that these units will not become small sequestered rooms full of compli-

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cated electronic equipment where infants are brought for intensive care and, in effect, put in the same kinds of isolation from which I hope we are now emerging. Nurseries must be designed to be flexible, where infants can be moved about freely and necessary floor space is tailored to the infants' needs and intensive care is given the infant in the middle of the nursery, with all personnel participating.

The definition? Newborn Special Care is simply a system whereby all infants with problems requiring special observation or special care, whether medical or surgical, diagnostic or therapeutic, infected or not infected; where full term or premature, outborn or inborn, are brought together into one well-appointed area where highly trained personnel can give the infant the necessary proper attention he requires.

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editorial comment

WARREN W. QUILLIAN, M.D.

Dr. Gluck has presented a well written and very interesting article. It indicates a new approach to an old problem.

During the earlier years "odd and artificial separations of care into separate premature nurseries" became a necessity. It was essential that these smaller infants, born before their time, should receive adequate, highly specialized supervision from competent, properly trained and dedicated personnel. This has been attempted through the years by regular training programs for interested graduate nurses, not only in Florida but in other states. The results of such efforts in Dade County are attested statistically by a definite decrease in morbidity and mortality, particularly among the children weighing less than two pounds at birth.

In the early period of the Premature Center at the Jackson Memorial Hospital, funding was difficult. Money received from the Florida State Board of Health and the U. S. Children's Bureau for physician and nurse training made it possible to continue this work until an awareness by the citizens of Dade County demanded some public allocation of local funds. Periodic seminars, available to nurses and physicians throughout the state, were conducted in an effort to spread further the know-how and experience gained here in combatting the problems of immaturity. In this program, education of the parents to their responsibilities was undertaken prior to discharge of the baby from the nursery. Follow-up care, with intelligent cooperation among physicians, nurses, county health departments and hospitals, has resulted in saving the lives of many of these babies who so desperately needed our help.

The key to the situation is the skillful administrations of a good nurse, properly trained in evaluation of the baby's condition, who can summon additional help when needed. The answer does not lie in figures on a dial or in the addition of various electronic gadgets. Upgrading of medical care will be predicated upon the skill and interest of the attending health team which has the responsibility of caring for the infant.

Some progress has been made over a period of 20 years. But let us not forget, in our desire to improve, the philosophy of the rocking chair which should be standard equipment in each nursery. The nurses are encouraged to utilize it in feeding and handling the infants after they are strong enough to be removed a portion of the day from the incubators. It constitutes a silent tribute to the value of tender loving care and emotional security for those children deprived by necessity of a mother's care and fondling during the early weeks of life.

All of us are grateful to Dr. Gluck for calling attention to new needs and desirable changes under present conditions of inadequate and untrained personnel. Let us hope that all newborn infants will soon be the recipients of the type of care they so richly deserve, and which he desires.

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Immunologic Response of the Fetus in Congenital Syphilis

Bernard J. Fogel, M.D., Akram M. Tamer, M.D., Rita M. Fojaco, M.D., Jose A. Herrera, M.D. and Phyllis Frank

The marked susceptibility of Treponema pallidum to penicillin therapy gave rise to the general belief that syphilis would soon be eradicated in the United States. Unfortunately, there has been a continuous increase in the number of case reports of primary and secondary syphilis since 1958. We pointed out previously that this is of special concern to the practicing pediatrician.[1,2] First, approximately 50% of all cases of infectious syphilis occurs among teenagers and young adults less than 25 years of age. Second, the rapidly rising incidence in this age group has resulted in a significant increase in the prevalence of congenital syphilis throughout the United States. Woody, et al,[3] reported seven cases of congenital syphilis in a 12-month period on a hospital service with more than 10,000 live births annually. The authors carefully pointed out that in each case "highly typical or suggestive evidence" of syphilis was present, but that the pediatric house officers "stumbled over" the diagnosis while the infants were being evaluated for other conditions.

Recently two newborns with florid congenital syphilis were admitted to the Jackson Memorial Hospital nursery. They are of particular interest because of the severity of the disease and because they clearly demonstrate that the fetus is capable of responding to antigenic stimulation.

Case Presentations

Case 1. — A 3 pound 5½ ounce female was born after 27 weeks gestation to a 38-year-old gravida 10, para 9, Negro female. The infant was born precipitously in the back seat of an automobile approximately 15 minutes prior to arrival at Jackson Memorial Hospital.

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When first seen, the infant appeared to be very weak and in moderate respiratory distress. Although the chest was clear, there were subcostal and intercostal retractions. The abdomen was distended. The liver was enlarged 5 cm. below the right costal margin and the spleen was palpable 3 cm. below the left costal margin. A diffuse skin eruption was noted over the entire trunk, face and extremities. The 2 cm. lesions were annular or oval in shape. Most were bulbous with a central area of raised white "cigarette-paper" epidermis and a peripheral ring of erythema. In spite of medical treatment, the infant died at 19 hours of age.

Laboratory data: The hemoglobin was 14 Gm. per 100 ml., hematocrit 46%, the white cell count 16,500 per cubic millimeter with 24 segmented cells, 24 stab forms and 47 lymphocytes. The VDRL and FTA (fluorescent treponema antibody test) of the mother's and infant's blood were both positive. Darkfield examination of scrapings from the skin lesions and from the aspirate of the anterior chamber of the eye were positive for spirochetes.

Roentgenograms of the infant's skeletal system revealed widespread osteochondritis and periostitis. Chest roentgenograms demonstrated diffuse, severe bronchopneumonia. Determination of the infant's immunoglobulin levels revealed: gamma G, 1200 mg. per 100 ml.; gamma M, 800 mg. per 100 ml., and gamma A, 16 mg. per 100 ml. (Table 1).

Autopsy showed findings of congenital syphilis involving the lungs, liver, skin, bone and pancreas. The thymus was identified only microscopically and showed severe involutive changes. Plasma cells were seen in the organs involved in addition to lymph nodes, spleen and gastrointestinal tract where germinal centers were also present.

Case 2.— A 5 pound 5 ounce Negro female infant was delivered vaginally by breech extraction after 36 weeks uneventful gestation. Five minutes prior to delivery the diagnosis of abruptio placentae was made. The mother was a gravida 8, para 7, 31-year-old Negro female who did not receive prenatal care. Her VDRL and FTA were positive.

Table 1.—Immune Gamma Globulin in Cord Blood*

	IgG	IgA	IgM
Normals	300-1650	0	5-25
(81)	(885)	—	(8.6)
Patient 1	1200	16	800
Patient 2	400	12.5	200

*Expressed as mg. per 100 ml. (or mg.%).

The infant's Apgar Score was 1 at one minute and 3 at five minutes. She required endotracheal intubation and oxygen administration for the first 10 minutes of life. Respiratory distress continued. She was dusky and looked anemic. The abdomen was distended. The liver was 5 cm. below the right costal margin and the spleen was 2.5 cm. below the left costal margin. The muscle tone was flaccid and she had no Moro or suck reflexes. There were no skin lesions.

Laboratory data: The hemoglobin was 6.6 Gm. per 100 ml., hematocrit 19%, leukocyte count 58,000 cells per cubic millimeter with 504 nucleated red blood cells per 100 white blood cells. The reticulocytes were 15.6%. The prothrombin time was 65 seconds with the control at 12 seconds. The partial prothrombin time was 350 seconds. The bilirubin at 10 hours of age was 18.8 mg. per 100 ml. total, and 5.8 mg. per 100 ml. direct. The hyperbilirubinemia persisted for six weeks with a high direct bilirubin proportion. The highest bilirubin was recorded on the seventh day, the total then was 42.53 mg. per 100 ml., and the direct bilirubin was 26.24 mg. per 100 ml. Coombs and Witebsky tests were negative. The SGOT was 290 units and the SGPT was 355 units on the first day of life. This enzyme elevation persisted for a five week period.

The alkaline phosphatase was 17 Bodanski units on the first day of life and was abnormally high for the first six weeks of life with a maximum of 70 Bodanski units at the third week of life. The VDRL in the cord blood was reported reactive at a 1:32 dilution. The FTA was also reactive. Protein electrophoresis showed hypoalbuminemia, 2.4 Gm. per 100 ml. The urine analysis was normal. Immune electrophoresis showed gamma G (IgG), 400 mg. per 100 ml.; gamma A (IgA), 12.5 mg. per 100 ml.; gamma M (IgM), 200 mg. per 100 ml. The chest x-ray was normal, the long bone x-rays showed generalized osteochondritis and periostitis. The initial skull x-rays were normal, but at three weeks of age a one inch in diameter osteolytic lesion was found in the right frontal bone.

Hospital course: The impression on admission was that the infant had septicemia and anemia. Following femoral vein puncture, a massive bilateral interstitial hematoma formed and two hours later the patient developed generalized petechiae and ecchymoses. The infant was started on penicillin and kanamycin therapy. A blood transfusion was given at four hours of age. Because of rapidly progressing jaundice, an exchange transfusion was performed at 10 hours of age and another exchange was done on the third day of life.

The infant exhibited clinical evidence of hepatitis, manifested by persistent jaundice for six weeks with a high enzyme level (SGOT, SGPT, alkaline phosphatase) persisting for five weeks. Bloody diarrhea and edema developed between the third and eighth day of life. She fed poorly and required intravenous fluid therapy. Because an osteolytic lesion developed on the frontal bone, another course of penicillin therapy was started at three weeks of age. At last examination, the patient's weight was still below the third percentile and the neurological examination was grossly abnormal. The liver was one inch below the right costal margin and was very hard on palpation.

Comments

A few years ago it was generally accepted that the fetus and newborn were incapable of producing gamma globulins. The IgG detectable in cord blood was passively transferred from the maternal circulation. During the past decade, evidence has accumulated which suggests that both the fetus and newborn are capable of responding to antigenic stimulation. The serologic and histologic data from our cases are classic examples of how the fetus responds to an intrauterine infection.

Table 1 demonstrates the results of immunoglobulin determinations performed on sera collected from normal full term and premature babies. IgG levels range from 300 to 1650 and are comparable to those found in maternal sera. IgM levels rarely exceed 15 mg. per 100 ml. and IgA levels should be undetectable in the cord blood. The IgG, IgM, and IgA levels from the two syphilitic patients are also shown in Table 1. Since the IgM and IgA do not pass the placenta, it is obvious that the elevated levels represent a response by the fetus to an in-utero spirochetal infection. The IgM levels in these two infants are considerably higher than those previously reported.[4] In an investigation of cord blood immunoglobulins, Alford[4] observed that infants with congenital rubella syndrome, toxoplasmosis, syphilis, and cytomegalic inclusion disease had concentrations of IgM higher than 20 mg. per 100 ml. Recently Scotti and Logan[5] demonstrated that the IgM antibodies in the cord blood of neonates with syphilis were specific for Treponema pallidum. These findings explain why the older literature contains many reports of cord blood VDRL titers which were higher than those found in the maternal sera.

Several years ago Silverstein[6] described the histopathological findings of congenital syphilis in human stillborn fetus. He observed inflammatory lesions with patterns of mature plasma cells and plasmacytoid cells. The well differentiated lymphoid tissue and presence of plasma cells in the autopsy specimens of the first case are consistent with the previous reports by Silverstein and with an active intrauterine immunologic response by the fetus to the spirochetal organisms.

References

1. Fogel, B. J.; Sanders, R. W.; Fife, E. H. Jr., and Anderson, R. L.: The Serodiagnosis of Early Syphilis, Clin. Pediat. 4:447, 1965.
2. Fogel, B. J. and Prieto, E. N.: The Dilemma of the Positive Cord Blood Serology, Bull. Jackson Mem. Hosp. and University of Miami School of Medicine 20:15, 1966.
3. Woody, N. C.; Sistrunk, W. F., and Platau, R. V.: Congenital Syphilis: A Laid Ghost Walks, J. Pediat. 64:63, 1964.
4. Alford, C. A. Jr.; Shaefer, J.; Blankenship, W. J., et al: A Correlative Immunologic Microbiologic and Clinical Approach to the Diagnosis of Acute and Chronic Infections in Newborn Infants, New England. J. M. 277:437-439, 1967.
5. Scotti, A. T., and Logan, L.: A Specific IgM Antibody Test in Neonatal Congenital Syphilis, J. Pediat. 3:242, 1968.
6. Silverstein, A. M.: Congenital Syphilis and the Timing of Immunogenesis in the Human Fetus, Nature 194:196, 1962.

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editorial comment

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In addition to its valuable contribution to the study of immune response of the fetus, this article by Dr. Fogel et al. provides a timely reminder that syphilis must not be overlooked in the differential diagnosis of neonatal disease.

Since 1958, there has been a 202.9 per cent rise in infectious syphilis in the United States. Although the mothers of the infants discussed in Dr. Fogel's article were 31 and 38 years old, the highest reported incidence of syphilis is between the ages of 15 and 29 years, essentially the same period during which the most pregnancies occur. Between 1960 and 1968 there was almost a three-fold increase in the number of cases of congenital syphilis reported in the U.S.[1] This is understandable, because many of the infected women do not seek prenatal care, so their infection remains unknown until the VDRL is reported positive on blood drawn during labor or on cord blood.

Pending arrival of that report, the infant's signs and symptoms of congenital syphilis may completely mislead the physician who has forgotten—or not yet learned—to consider Treponema pallidum when the clinical diagnosis is septicemia or remains obscure.

1. Fiumara, Nicholas J.: Venereal Disease, Pediatric Clinics of North America 16:(2)333-345 (May) 1969.

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Small Bowel Atresia
Pathogenesis and Treatment

Marc I. Rowe, M.D.

As recently as 1952[1] the overall mortality for intestinal atresia exceeded 80%. This unacceptably high figure has now been significantly reduced. It is the purpose of this review to trace some of the changes in the concepts of the pathogenesis and operative treatment of jejunal and ileal atresia that have contributed to a lower mortality rate.

Pathogenesis

Tandler, in 1902,[2] demonstrated that the duodenum passed through a solid stage during embryonic development. Epithelial proliferation in the fifth week of gestation led to complete obliteration of the bowel lumen. The lumen reopened during the eighth week by coalescence of vacuoles in the epithelial plugged bowel. He suggested that arrest of development of the duodenum during the solid stage resulted in atresia. This explanation was widely accepted and applied to atresias in all areas of the gastrointestinal tract. Louw, in 1959,[1] summarized the clinical and experimental evidence against this concept and suggested that intestinal atresia was the result of interruption of the blood supply, necrosis and reabsorption of a segment of the sterile fetal bowel. He studied 35 patients during operation and 79 pathological specimens. Meconium and squamous cells were present below the atretic segment of intestine in 40% of the cases and bile in 10%. The solid stage of intestinal development takes place between the fifth and eighth week of embryonic life, but bile is not secreted until the eleventh week and squamous cells do not develop until the third month. The finding of this material below an area of atresia obviously could not be consistent with an arrest of development of the bowel during the fifth to the eighth week, but was perfectly consistent with vascular occlusion of mesenteric blood vessels resulting in atresia sometime after the eleventh week of fetal development.

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In support of Louw's vascular interference hypothesis, Santulli and Blanc[3] found meconium, hair and squamous cells below the atretic area in all 19 of the cases they studied. In nine of these patients a congenital band, an incarceration of the intestine through the umbilical ring, or a volvulus were identified as the causes of the vascular interference. Recent confirmatory evidence that epithelial proliferation and plugging of the lumen are not an important factor in jejunal and ileal atresia was presented by Moutsouris.[4] In the embryos he studied, significant epithelial proliferation and filling of the lumen failed to take place below the duodenum.

Barnard's[5] experiments supplied further evidence in support of the vascular interference theory of intestinal atresia. He ligated mesenteric vessels or created strangulated obstruction of the small bowel of the fetal dog. When the puppies were born all grades of atresia were found. The outcome depended on the site and extent of vascular interference. With occlusion or interference of the blood supply to a segment of the sterile fetal bowel, necrosis did not lead to a catastrophic peritonitis, but a mild nonbacterial inflammatory reaction. A gradual reabsorption of the infarcted area of intestine followed, resulting in the formation of an atretic portion of small bowel.

Treatment

Essentially all pediatric surgeons advocate wide resection of the dilated blind proximal segment of small bowel along the fibrotic atretic area. Failure to resect the proximal dilated segment leads to poor healing of anastomotic lines and functional obstruction at the anastomotic site. Nixon[6] suggested that the dilated end of the bowel had been over-distended from intrauterine intestinal obstruction and, therefore, lacked tone and efficient peristaltic activity. Louw states[7] that there is compromise of the blood supply to this portion of bowel and its retention and use as an area for anastomosis would result in poor motor function and delayed healing.

Although there is almost universal agreement about the amount of bowel to resect, the method of restoration of intestinal continuity has varied among pediatric surgeons. Reconstruction by side-to-side anastomosis is avoided because of the development of the blind loop syndrome. Many surgeons prefer a primary end-to-end anastomosis. Louw[7] treated 33 patients with ileal and jejunal atresia in this manner. The overall survival was 94% although 14 infants were premature and 12 had significant associated congenital anomalies.

In spite of these excellent results there are still many advocates of a staged operative approach to intestinal atresia. The Mikulicz double enterostomy was used to treat 39 patients with intestinal atresia by Randolph, Zollinger and Gross.[8] The advantages of this technique were its rapidity when treating a desperately ill tiny infant, the avoidance of technical and healing problems associated with an anastomosis and the immediate establishment of a decompressing stoma to relieve intestinal obstruction. Five days after operation, the spur between the two stomas was crushed and the loss of intestinal secretion reduced. Intestinal continuity was later restored by an extra peritoneal closure of the stoma. A survival rate of 71% was reported.

Somewhat different staged procedures have been used by Bishop and Koop[9] and Santulli and Blanc.[3] Both of these operative techniques require an intra-abdominal end-to-end anastomosis and the creation of a single decompressing stoma of either the distal or proximal bowel. In general, the best results as yet reported have been with the primary end-to-end anastomosis. The staged decompressive procedures appear particularly suited for the desperately ill or complicated baby.

A serious problem following resection of large segments of intestine for extensive or multiple atresias is the development of the short-bowel syndrome. In recent years, several advances have been made in the management of patients who have lost the major portion of their small intestine. Adults have survived resection of all but 10% of their jejunum and ileum and maintained proper nutrition. However, the problem in the newborn is compounded by the additional requirements of growth and development. The percentage of bowel that must remain for a baby to survive is difficult to estimate. Most authorities now believe it is better to discuss the centimeters of bowel left after resection rather than the percentage of intestine removed. This is important since the length of the small intestine in the baby varies according to the disease process, the size of the infant and the gestational age. Benson et al.[10] estimated that a full term infant has approximately 248 cm. of small bowel while a premature infant's small bowel length varies between 160 and 240 cm. The infant can survive and maintain a satisfactory nutritional state with 30-35 cm. of small bowel remaining as long as the ileocecal valve is present. The loss of the jejunum is better tolerated than loss of the ileum. The adjustment to massive bowel resection is produced by an increase in the calibre of the bowel and arborization of the villi, making a greater absorptive surface available.[11] In addition, since the normal baby's intestine triples in length during growth and development, there is an increase in absolute length of the bowel as growth proceeds.

Eight of ten babies studied by Benson et al.[10] survived after massive small bowel resection. Early there was a severe defect in fat absorption; protein absorption was only slightly diminished and carbohydrate absorption was essentially normal. The two major postoperative difficulties were fulminating diarrhea and severe acidosis. The cornerstone of treatment was long term supplementary intravenous feedings and correction of acid base disturbances.

Wilmore and Dudrick[12] recently reported the striking survival of a premature infant with only 3 cm. of ileum remaining after resection for extensive large and small bowel atresias. This tiny infant was maintained for 44 days entirely on intravenous fluids. A 30% mixture containing essential nutrients, calories and nitrogen was infused continuously through the inferior vena cava by a pump. During the 45 days, normal growth and development proceeded and the infant finally began to tolerate oral feedings.

Reversal of a segment of small intestine has been a partially successful solution to the problem of the short gut in the experimental animal and the adult patient. The reversal produces an incomplete intestinal obstruction delaying transit time and allowing a prolonged period of absorption. Mall[13] first reported this procedure in 1896. It has since been a subject of many clinical and experimental studies.[14,15] The length of segment to be reversed is critical since it must be long enough to delay the passage of intestinal contents but not so long that complete intestinal obstruction is produced. While the ideal length in the dog and the adult human is known, the length of segment to be reversed in the neonate has not been settled.

A promising approach to reduce the morbidity and mortality of patients suffering from the short-bowel syndrome has been introduced by Frederick, Craig and their co-workers.[16-18] After massive small bowel resection there is hypersecretion of gastric acid into the intestine which leads to diarrhea. A vagotomy and pyloroplasty reduced the gastric hypersecretion and as a result diarrhea was reduced. There have been a number of clinical and experimental survivors following 80% small bowel resection when a vagotomy and pyloroplasty was performed. Recently, Randolph and Lilly[19] studied puppies subjected to 66% enterectomy with and without vagotomy and pyloroplasty. Puppies with the added vagotomy and pyloroplasty had a significantly greater growth and a lower mortality. As yet there have been no reports of the use of this operation to treat the newborn suffering from the short bowel syndrome.

Summary

Atresia of the small bowel develops as a consequence of interference with the blood supply to a segment of the fetal intestine. Surgical treatment includes a generous resection of the proximal dilated blind end of the small bowel as well as the atretic segment. The manner of re-establishing intestinal continuity is controversial but excellent results have been attained with a primary end-to-end anastomosis. Survival following massive small bowel resection is now possible in the infant with the proper regulation of oral and intravenous nutrition and, perhaps, by the use of vagotomy and pyloroplasty.

References

1. Louw, J. H.: Congenital Intestinal Atresia and Stenosis in the Newborn, Ann. Royal College of Surgeons of England, 25:209-234, 1959.
2. Tandler, J.: Morphol. Jb., 29:187, 1902.
3. Santulli, T. V. and Blanc, W. A.: Congenital Atresia of the Intestine: Pathogenesis and Treatment, Ann. Surg. 154:939, 1961.
4. Moutsouris, Chi: The "Solid Stage" and Congenital Intestinal Atresia, J. Ped. Surg. 1:446, 1966.
5. Barnard, C. N.: The Genesis of Intestinal Atresia, Minnesota Med. 39:745, 1956.
6. Nixon, H. H.: Intestinal Obstruction in the Neonatal Period, Great Ormond St. J. 11:1, 1956.
7. Louw, J. H.: Resection and End-to-End Anastomosis in the Management of Atresia and Stenosis of the Small Bowel, Surgery 62:940, 1967.
8. Randolph, J. G.; Zollinger, R. M. Jr., and Gross, R. E.: Mikulicz Resection in Infants and Children, Ann. Surg. 158:481, 1963.
9. Bishop, H. C. and Koop, C. E.: Management of Meconium Ileus: Resection, Roux-en-Y Anastomosis and Ileostomy Irrigation with Pancreatic Enzymes, Ann. Surg. 145:410, 1957.
10. Benson, C.D.; Lloyd, J. R., and Krablenhaft, K. L.: The Surgical and Metabolic Aspects of Massive Small Bowel Resection in the Newborn, J. Ped. Surg. 2:227, 1967.
11. Clatworthy, H. W. Jr.; Salesby, R., and Lovingood, C.: Extensive Small Bowel Resection in Young Dogs; Its Effect on Growth and Development, Surgery 32:341, 1952.
12. Wilmore, D. W. and Dudrick, S. J.: Growth and Development of an Infant Receiving all Nutrients Exclusively by Vein, J.A.M.A. 203:104, 1968.
13. Mall, F.: Reversal of the Intestine, Reports Johns Hopkins Hosp., 1:93, 1896.
14. Stahlgren, L. H. et al: Study of Intestinal Absorption in Dogs Following Massive Small Intestinal Resection and Insertion of Antiperistaltic Segment, Ann. Surg. 156:483, 1962.
15. Shepard, D.: Antiperistaltic Bowel Segment in the Treatment of the Short Bowel, Ann. Surg. 163:850, 1966.
16. Craig, T. V. and Stewart, W. R.: Massive Bowel Resection in a Patient With 75% Gastrectomy, Surgery 48:678, 1960
17. Frederick, P. L. and Craig, T. V.: Effect of Vagotomy and Pyloroplasty on Weight Loss and Survival of Dogs After Massive Intestinal Resection, Surgery 56:135, 1964.
18. Frederick, P. L.; Sizer, J. S., and Osborne, M. P.: Relation of Massive Bowel Resection to Gastric Secretion, New England Med. J. 272:509, 1965.
19. Randolph, J. G. and Lilly, J. R.: The Influence of Vagotomy and Pyloroplasty on the Growth and Survival of Enterectomized Young Animals, J. Ped. Surg. 3:232, 1968.

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editorial comment

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This splendid review of the pathogenesis and surgical management of small intestinal atresia records the improvement in survival that has resulted from accurate embryological interpretation coupled with refinements in operative and postoperative care. Surgeons had long been puzzled by the intestinal vacuolization theory, for they had noted the gross evidence of bile-stained material distal to points of atresia. Such observations serve to emphasize the importance of logical, scientific thinking and study in the understanding and solution of problems encountered in clinical surgery.

A great deal of emphasis can rightly be placed on the importance of early recognition of the baby who has intestinal atresia. This results in prompt laparotomy at a time when the overall condition of the infant and locally of the bowel are such that resection with end-to-end anastomosis is feasible; hence, operative mortality will be lower. The severely ill, debilitated infant whose atresia has not been recognized early often has added respiratory complications from vomiting and aspiration. Although enterostomy in the debilitated infant offers less operative insult than resection with primary anastomosis, postoperative management is more demanding and in itself may account for added mortality.

Recent refinements in long term intravenous alimentation are added tools to tide over the infant with short bowel syndrome until intestinal growth can occur. Investigative efforts hold promise of additional help in the solution of the short bowel syndrome. Meanwhile, of foremost importance in survival of these infants is excellent postoperative monitoring and nursing care in a neonatal surgical unit.

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Testicular Feminization

Report of Three Cases

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Three patients with testicular feminization have been seen at the University of Florida Teaching Hospital in the years of 1966-1968. A number of characteristic features were present in each of them; however, they were dissimilar enough to accentuate different facets of the diagnosis and management of this entity.

Patients with testicular feminization fall into the category of male pseudohermaphrodism. Possibly its most unique feature is the fact that unlike other forms of male pseudohermaphrodism, there is no confusion in the sex which should be assigned to these patients. They have normal female external genitalia at birth and a normal female developmental pattern in the anticipated period.

In 1953, Dr. John Morris of Yale University reviewed the literature and reported 82 cases of biopsy-proven testicular feminization.[1] He reported an additional 99 cases in 1963.[2] Other cases were found which probably represented the syndrome, but no biopsy had been obtained. Morris added two other cases to the literature in 1953 and four in 1963. The incidence of testicular feminization has been reported to be between one in 2,000 to one in 62,400 males.[3] Netter and co-worker state that 15% to 20% of intersex individuals, with other than gonadal dysgenesis, are cases of testicular feminization.

Classical clinical features typically seen in testicular feminization are (1) normal female appearance and fat distribution, (2) normally developed to over-developed breasts, but with poorly developed nipples, (3) scanty body hair and particularly sparse axillary and pubic hair, (4) normal but often infantile female external genitalia, (5) adequate vagina which ends blindly, (6) absent or extremely rudimentary uterus, (7) absent or poorly developed fallopian tubes, and (8) a high incidence of inguinal hernia.

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We wish to thank Dr. Thomas F. Hegert of Orlando and Dr. Charles A. Johnson Jr. of Clearwater for the study of their patients.

Classic Case

The first patient, a 44-year-old single, white female, was first seen in 1967 and presents a case of classical testicular feminization. She was attractive, with female body habitus and well-developed breasts. The external genitalia were infantile and the vagina ended blindly at approximately two inches of depth. When first examined in 1964 at Syracuse, New York, no uterus or cervix was palpable, the right testicle was located in the right adnexa, and the left testicle in the left groin. There was no history of inguinal hernia. Chromosome analysis revealed 32 cells with 46, two with 45, and one tetraploid cell in 35 leukocyte metaphases examined. Karyotype demonstrated an XY sex chromosome complex. Buccal smear showed 1% to 5% positive for chromatin in 500 cells examined. The patient has two sisters, both of whom exhibit primary amenorrhea infertility. One sister was examined in Birmingham, Alabama and found to be a case of testicular feminization.

The clinical features of this patient are classic for testicular feminization. She was phenotypically female, had well-developed breasts but poorly developed nipples, lacked pubic and axillary hair, had an infantile external genitalia, and no uterus or fallopian tubes.

These classical features result from failure of development of the mullerian duct system of the embryo, while the external genitalia and developmental pattern are female. It is known that normal development of the mullerian duct system depends upon an absence of testis rather than a positive influence from ovarian tissue. Thus, castration of a male embryo at an early stage in development results in a phenotypic female. The fetus would have a normally developed mullerian duct system, however, in contrast to a patient with testicular feminization. Studies by Jost and others suggest that the fetal testicle

regulates sex development with the aid of two different hormone systems: one of classical steroid androgens; the other, of unknown nature, causes regression of the mullerian ducts.[4] Such a scheme would explain the failure of mullerian duct system development and the absence of masculinization as, for example, the development of the prostate and seminal vesicles.

Numerous studies have been carried out to elucidate the biochemical properties of the gonadal tissue of patients with testicular feminization. Present evidence indicates that the testes are able to synthesize testosterone normally and maintain levels in plasma and urine similar to those of normal males. Rivarola, et al. determined the concentration of testosterone, androstenedione and dehydroepiandrosterone in spermatic and peripheral veins in 11 patients with testicular feminization.[5] Normal male levels of testosterone were found in peripheral plasma. This is in agreement with the work of Southern, French and others. Testicular secretion of testosterone, androstenedione, and dehydroepiandrosterone was established in all patients on the basis of peripheral to spermatic vein differences in concentration. A single patient was studied seven years after gonadectomy and found to have low levels of urinary testosterone. This is additional evidence of the testicular origin of testosterone in patients with testicular feminization.

Griffiths and Grant performed in vitro studies in the testicular tissue of a patient with testicular feminization.[6] The formation of testosterone from progesterone was demonstrated and androstenedione was readily converted to testosterone by this tissue. No estrogen formation could be detected, and urinary estrogen concentrations were found to be at a low end of the range of normal women. Urinary estrogen levels fell after gonadectomy. Hulka and Solomon determined urinary estrogen levels prior to and following gonadectomy in the case of a 17-year-old female with testicular feminization.[7] In contrast to the data of Griffith's, urinary estrogen levels did not fall, and 19 months after surgery the patient remained well feminized despite the fact that she had not received estrogen replacement. Adrenal stimulation resulted in a rise in urinary estrogen while suppression resulted in a fall. The authors concluded that the estrogens being produced by the patient after gonadectomy were at least partially of adrenal origin.

Patients with testicular feminization failed to virilize at adolescence even though the testes are able to synthesize testosterone normally. Estrogen production is sufficient to stimulate feminine development at adolescence but cannot explain the lack of virilization. There is evidence to support the hypothesis that this syndrome is a result of a defect in the peripheral response to androgens; that is, end organ failure. The work done by French, et al. at the University of North Carolina supports this hypothesis. A patient with testicular feminization was found to have (1) a normal disappearance rate of testosterone in plasma, (2) normal urinary metabolites of testosterone, and (3) no alteration of nitrogen metabolism after stimulation with testosterone propionate. Gwinup and Weiland stimulated a patient with testicular feminization with massive doses of testosterone without evidence of masculinization and no increase in serum production.[8]

It is of interest to note that the first patient has a family history of testicular feminization. A familial tendency in this syndrome is well documented, and it is not unusual to obtain a history of a sister or an aunt with identical clinical features.

Associated Inguinal Hernia

The second patient is an 18-year-old, single, white female initially admitted to the gynecology service for evaluation in 1966. She gave a history of normal female development but had not experienced menarche. As an infant she wore a truss for a number of months but did not require herniorrhaphy, and her apparent inguinal hernias resolved spontaneously. On physical examination she was found to be slightly overweight with a prepubertal female body habitus. She had minimal breast development and no pubic or axillary hair. The external genitalia were infantile, and there was no clitoral hypertrophy. The vagina was four centimeters in depth ending blindly. No uterus, cervix or adnexal structures could be palpated. Chromosome analysis revealed an XX/XY mosaic. Buccal smear showed less than one per cent Barr body. At the time of laparotomy, well-developed and well-differentiated testicular tissue but poorly developed fallopian tubes were identified bilaterally. No uterus was identified. Microscopic examination of the gonadal tissue revealed seminiferous tubules of the underdeveloped type seen in cryptorchism, no spermatogonia, and a tubular adenoma of the left testicle. At the present time she is on replacement estrogen.

This patient brings up several interesting aspects of this condition. First, she had inguinal hernias as an infant, a common finding. It is

stated that four out of five affected individuals give a history of the repair of an inguinal hernia in infancy or childhood, and often a testis is found in the sac. It has been found that one of every 120 operations for inguinal hernia performed in young girls will reveal the presence of testes.

A second facet is her chromosome mosaicism. The sex chromosome complement of patients with testicular feminization is usually XY; however, other chromosome patterns have been found. In 1963 Morris and Mahesh reported a patient with a chromosome pattern of XO/XY/XX. In 1964, Miller reported a case of monozygotic twins; both had a XXY complement and testicular feminization. A patient with a XY/XYY XY sex chromosome mosaic was reported in 1965 by Forsburg.

A final factor brought out by this patient is the presence of a tubular adenoma of the left testicle. Microscopic examination of the gonadal tissue of these patients reveals immature testes similar to those of the cryptorchid male. Spermatogenesis is diminished, there is a predominance of Sertoli's cells, seminiferous tubules are immature and somewhat hyalinized, and there is usually a marked increase in interstitial cells. The malignant potential of these gonads is noteworthy. Morris reported a rate of malignancy of 8.5% in his series in 1953 and 22% in 1963. It was recognized that this incidence of malignant tumors is obviously abnormally high because in many instances it was the indication for operation that brought the patient to the attention of a physician. Other authors reported incidents between 5% and 10%. Tubular adenomas and benign cysts are also frequently encountered. Gonadectomy was carried out in the second patient because of the high incidence of malignant change.

The work of Magi indicates that removal of the testes prior to puberty results in the failure of feminization. Thus, some authors advise removal only after puberty; however, availability of estrogenic drugs may make this unnecessary and undesirable.

Presence of Behavioral Problems

The third patient is a nine-year-old white female who was originally referred to the Child Psychiatry Service for evaluation of a behavioral problem. She was described by her parents as a very unhappy child who could not get along with her family or teacher and had few friends. She was reported to have a violent temper, and on at least one occasion had threatened the life of her mother. At the age of three years an inguinal hernia developed. At the time of herniorrhaphy, gonadal tissue was found in the inguinal canal. This was biopsied and proved to be testicular tissue. Her parents were informed that she possessed gonadal tissue of the type normally found in males.

When first seen at the University of Florida at age nine, she was described as a somewhat muscular, shy and attractive girl. She had normal prepuberal female external genitalia without pubic hair or clitoral hypertrophy. The vagina ended as a blind pouch at 4½ cm. A 1½ cm. mass was felt in the inguinal region on both the right and left. Buccal smear was negative, and chromosome analysis revealed an XY karyotype. Karyotype on two sisters showed an XX pattern. The patient underwent bilateral inguinal exploration with the removal of hypoplastic testicular tissue bilaterally.

This patient draws attention to the psychological aspects of this syndrome. Psychologic adjustment is usually excellent. Those patients who remain undiagnosed can be expected to function as normal females except they will be infertile. A large percentage have normal marriages. When the diagnosis is known, it is essential that the patient and the patient's family be reassured that the patient is female and can anticipate a normal female development. Psychologic problems can arise, however, as seen in this patient. At the time the patient was born, the parents had a strong desire for a male child. To some extent, she was reared along masculine lines. The parent's awareness that testicular tissue was found undoubtedly exaggerated her problems.

Conclusion

The diagnosis of testicular feminization should be suspected in any female who presents with amenorrhea and infertility. If the patient is found to have the classical clinical findings, there should certainly be a high index of suspicion. In addition, because of the high incidence of testicular feminization among young girls who have inguinal herniation, the diagnosis should be suspected in any girl requiring herniorraphy. In addition to adequate pelvic examination, buccal smear and chromosome analysis are essential. Once the diagnosis has been established, the decision for or against gonadectomy must be made. Of equal importance is the manner in which the diagnosis is presented to the patient and to the parents if she is a child. It must be stressed that while some gonadal tissue is not entirely normal, these patients are female. The family shou'd be reassured

that normal female development can be anticipated and a normal married life with the exception of infertility. If the vagina is so immature as to require a vaginoplasty, this must be carried out at the appropriate time.

References

1. Morris, J., The Syndrome of Testicular Feminization in Male Pseudohemaphrodites, Am. J. Obst. & Gynec., 65:1192, 1953.
2. Morris, J. and Mahesh, V. B.: Further Observations on the Syndrome, "Testicular Feminization," Am. J. Obst. & Gynec. 87:731, 1963.
3. Dewhurst, C. J.: The XY Female, J. Obst. & Gynec. of the British Commonwealth, 74 (3):353, 1967.
4. Dewhurst, C. J.; Paine, C.G., and Blank, C. E.: An XY Female with Absent Gonads and Vestigal Pelvic Organs. J. Obst. & Gynec. of the British Commonwealth, LXX (4):675, 1963.
5. Rivarola, M. A. and Saez, M. M.: Studies of Androgens in the Syndrome of Male Pseudohermaphroditism with Testicular Feminization, J. Clin. Endo. and Met. 27:(3):371, 1967.
6. Griffiths, K. and Grant, J. K.: Steroid Biosynthesis in vitro by Cryptorchid Testes From a Case of Testicular Feminization, J. Clin. Endo. and Met. 23:(10)1044, 1963.
7. Hulka, J. F. and Solomon, S.: Possible Adrenal Origin of Estrogens in the Testicular Feminization Syndrome, Am. J. Obst. & Gynec. 96:(2):168, 1966.
8. Gwinup, G. and Wieland, R. G.: Studies on the Mechanism of the Production of the Testicular Feminization Syndrome, Am. J. Med. 41:448, 1966.

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Evaluation of a New Enzymatic Paper-Strip Method for Blood Urea Nitrogen Estimation

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Outpatient clinics, night laboratories, laboratories on hospital wards and in offices of practicing physicians need fast and reliable screening tests for blood urea determination. Among the rapid tests available for determination of blood urea nitrogen, one uses a contact enzymatic paper-strip.* An evaluation of this new reagent strip is presented.

Materials and Methods

The test system consists of plastic strips coated at one end with a mixture of urease and bromthymol blue pH indicator and sealed with a semi-permeable coating that allows diffusion of cell-free plasma (or serum) into the reagent mixture. The urease converts urea to ammonium hydroxide and CO_2. The pH change in a given time interval is proportional to the amount of urea split by urease. The final color is compared to a color chart with blocks representing equivalents of 10-20-40-60 mg. of urea/100 ml. Capillary or oxalated blood is recommended by the manufacturer, but sodium or K oxalate, citrate, heparin or EDTA may be used as the anticoagulant. Fluorides, ammonium salts, or thymol must not be used.

The concentration of urea nitrogen of 100 whole blood and serum samples from patients in the hospital was determined by the reagent strip method and in parallel by the reference method (AutoAnalyzer[1,2]). Fifteen to 20 samples were selected from the daily laboratory work. The serum samples varied in color and clarity and some were icteric or showed moderate hemolysis. Fluorescent lighting in a large air-conditioned room was used, and the tests were done in several locations in the laboratory.

The reagent strip method was followed exactly as specified in the brochure of the package except where serum was used, in which case the time of

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*Axostix®, Ames Company, a Division of Miles Laboratories, Elkhart, Ind.

Figure I

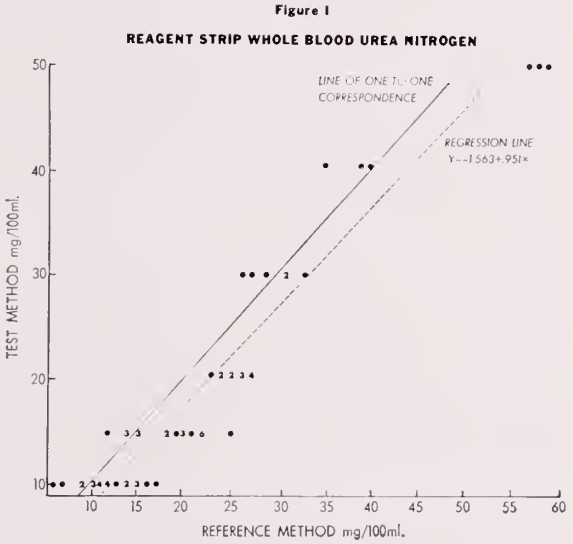


Fig. 1. — Comparison of test method in oxalate whole blood against reference method (AutoAnalyzer). Values under 10 and over 60 mg./100 ml. are not included.

Figure II

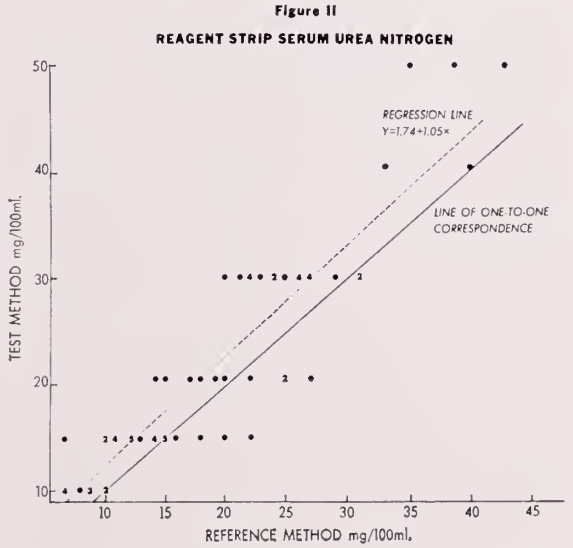


Fig. 2. — Comparison of test method in serum against reference method (AutoAnalyzer). Values under 10 and over 60 mg./100 ml. are not included.

contact was reduced to 45 seconds, since 60 seconds as recommended overestimated the AutoAnalyzer values up to 15 mg./100 ml. in all samples.

Variations of temperature, color of serum, and drafts do not interfere with the determination. However, readings should be made within 15 seconds of washing, or a repeat is necessary due to the color fading. Interpolation was performed to the exact medium point between two color blocks.

Results

The results are listed in Tables 1, 2, and 3.

Table 1 compares the results determined with whole blood with those for serum and with the AutoAnalyzer values. In 100 tests, the reagent strip method, using whole blood, underestimated the AutoAnalyzer with a bias of approximately -3, while the results in serum overestimated the AutoAnalyzer with a bias of approximately +3. This was anticipated because the urea nitrogen values are about 2 mg./100 ml. higher in serum than in whole blood. The range from the reference values for whole blood was -10 to +7 mg./100 ml. and for the serum, +15 to -7 mg./100 ml.

Figures 1 and 2 illustrate the comparison of oxalated whole blood and serum against the AutoAnalyzer, as well as their accuracy within the ranges between 10 and 60 mg./100 ml. The regression line and the line of 1-1 correspondence are almost parallel. The equation for the regres-

TABLE 1.—COMPARISON OF RESULTS DETERMINED IN THE WHOLE BLOOD AND SERUM WITH THE AUTOANALYZER IN 100 PATIENTS DATA FORM (BUN) MG. PER 100 ML.

No. Tests	Result AutoAnalyzer	Result Reagent Strip Whole Blood	Result Reagent Strip Serum
1	1	<10	<10
2	3	<10	<10
3	5	<10	10
4	6	<10	<10
5	6	10	10
6	6	<10	<10
7	6	<10	<10
8	7	<10	10
9	7	10	10
10	7	<10	10
11	7	<10	<10
12	7	<10	<10
13	7	<10	<10
14	7	<10	10
15	7	<10	<10
16	7	<10	10
17	7	<10	<10
18	8	10	10
19	9	10	10
20	9	<10	10
21	9	10	10
22	10	10	15
23	10	10	10
24	10	10	15
25	10	10	10
26	11	10	15
27	11	10	15
28	11	10	15
29	11	10	15
30	12	10	15
31	12	10	15
32	12	10	15
33	12	10	15
34	12	15	15
35	13	10	15
36	14	10	15
37	14	15	20
38	14	15	15
39	14	15	15
40	14	10	15
41	15	15	15
42	15	10	15
43	15	15	15
44	15	10	15
45	15	10	15
46	15	15	20
47	16	10	15
48	17	10	20
49	18	15	20
50	18	15	15
51	18	15	20
52	19	15	20
53	20	15	20
54	20	15	20
55	20	15	15
56	21	15	30
57	22	15	30
58	22	15	30
59	22	15	30
60	22	15	30
61	22	15	20
62	22	15	15
63	23	20	30
64	24	20	30
65	24	20	30
66	25	20	30
67	25	15	20
68	25	20	20
69	27	20	30
70	26	20	30
71	26	20	30
72	26	30	30
73	27	20	20
74	27	20	30
75	27	20	30
76	27	30	30
77	27	20	30
78	29	30	30
79	31	30	30
80	31	30	30
81	33	30	30
82	35	40	50
83	39	40	50
84	40	40	40
85	43	50	50
86	47	50	50
87	47	50	50
88	57	50	>60
89	58	50	>60
90	59	50	>60
91	65	>60	>60
92	74	>60	>60
93	79	>60	>60
94	81	>60	>60
95	81	>60	>60
96	94	>60	>60
97	99	>60	>60
98	106	>60	>60
99	118	>60	>60
100	260	>60	>60

Table 2.—Comparison of Reported Values for Whole Blood (mgs. per 100 ml.).

Reagent Strip	AutoAnalyzer								
	1–4	5–9	10–20	21–25	26–30	31–40	41–50	51–60	Over 60
Less than 10	2	15							
10*		4	20						
15			14	8					
20*				5	7				
30					3	3			
40*						3			
50							3	3	
60*								0	
Over 60									10

Table 3.—Comparison of Reported Values for Serum (mgs. per 100 ml.).

Reagent Strip	AutoAnalyzer								
	1–4	5–9	10–20	21–25	26–30	31–40	41–50	51–60	Over 60
Less than 10	2	8							
10*		11	2						
15			24	1					
20*			8	3	1				
30				9	9	3			
40*						1			
50						2	3		
60*								0	
Over 60								3	10

*Values supplied by manufacturer. Others read by interpolation.

sion line for whole blood was y= -1.563 + .951 X and for serum y = 1.74+ 1.05 X. Tables 2 and 3 show the number of tests that read above and below the values obtained by the AutoAnalyzer. Sometimes the values obtained by the reagent strip did not correlate in the same group as the AutoAnalyzer, like test number 67 in whole blood and numbers 82 and 83 in serum, but these values are close enough for evaluation of the patient.

Discussion

The determination of urea nitrogen by conventional method involves special laboratory equipment and time-consuming technique, therefore a rapid semiquantitative technique, if reliable, would be useful in bedside, doctor's office and emergency room laboratory application as a screening test to separate the normal group from the abnormal groups.

The reagent strip test is reliable, but with limitation, as its upper limit of sensitivity is 60 mg. of urea N./100 ml. Evaluation of a moderately azotemic patient by this reagent strip is satisfactory. The time element is another advantage of the reagent strip, for the test can be completed in less than two minutes.

When using the reagent strip, urea nitrogen values from 10 to 40 mg. are distinguished easily because of the clear distinction among the shades of green at these concentrations. Values of over 60 mg./100 ml. had a 100% correlation. With sera having a urea nitrogen concentration of over 60 mg./100 ml. a deep blue color is obtained. Interpolation was kept to the mid-point between two color blocks.

We recommend that the results of the final reagent strip be interpreted by qualified personnel. Abnormal results must be sent to a clinical pathology laboratory.

Summary

Urea nitrogen in samples of blood and serum obtained routinely from 100 patients was measured by a new fast enzymatic paper-strip method. Values obtained were compared with the AutoAnalyzer as the reference method, and the mean differences were -10 to +7 mg./100 ml. for whole blood and +15 to -7 mg./100 ml. for serum. The results for serum overestimated the AutoAnalyzer with a bias of approximately +3 and underestimated in whole blood with a bias of approximately -3. The enzymatic paper-strip is a satisfactory screening method for values of less than 10 mg., 10 to 60 mg., and over 60 mg./100 ml. of urea nitrogen.

References

1. Marsh, W. H.; Fingerhut, B., and Kirsch, E.: Determination of Urea Nitrogen with the Diacetylmonoxime Method and an Automatic Dialyzing Apparatus, Am. J. Clin. Path. 28:681-688, 1957.
2. Skeggs, L. T.: An Automatic Method for Colorimetric Analysis, Am. J. Clin. Path. 28:311-322, 1957.

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The Value of Routine Intravenous Pyelography Prior to Elective Gynecologic Operations

Ellie M. Hartog, M.D. and James A. O'Leary, M.D.

Stereotyped preoperative diagnostic aids should be periodically reevaluated to ascertain their real value. In teaching institutions a vast array of procedures and tests are employed daily without thought as to their true value, usefulness, or expense. The routine employment of the excretory urogram (intravenous pyelogram) prior to all cases of elective gynecologic surgery is deserving of reconsideration.

Case Material

A total of 375 consecutive gynecologic patients were evaluated in this project which covered the period 1965-1967. Patients with a pelvic malignancy were not included in the study. All patients underwent either total abdominal or vaginal hysterectomy with plastic repair. The adnexa were frequently excised. A total of 375 intravenous pyelograms, 100 chest x-rays, and 50 barium enemas performed as routine preoperative screening tests were reviewed.

Results

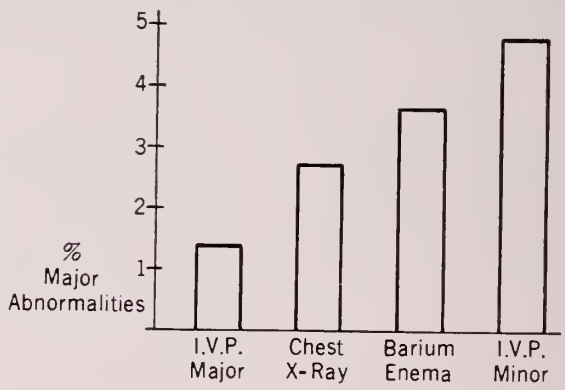
Significant and major unsuspected urologic conditions were found in seven women (1.8%), and incidental or minor abnormalities in 18 (4.8%). The pyelographic findings are outlined in Table 1.

The survey of 100 chest x-rays disclosed 3% abnormality rate, while 4% of the barium enema studies varied from the normal. Table 2 demonstrates graphically a comparison of the three studies and vividly demonstrates the true effectiveness of the intravenous pyelogram.

Table 1.—I.V.P. Findings

Total number of cases:	375
Major abnormalities:	7 (1.8%)
Minor abnormalities:	18 (4.8%)
Major abnormalities:	Hypoplastic kidney 1
	Double ureter 4
	Unilateral agenesis 1
	Pelvic kidney 1
Minor abnormalities:	Extrinsic pressure 9
	Caliectasis 3
	Medial displacement 6

Table 2.—Graphic Analysis of X-ray Studies



Comment

Physicians are constantly searching for methods to improve their skills, effectiveness, and efficiency. Although the female genitourinary tracts are in close approximation this does not infer that benign disorders of the genital tract produce major or significant abnormalities in the urinary system. In the present study none of the pyelographic changes were important enough to alter the sur-

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gical procedure. In the presence of renal agenesis or ureteral duplication greater caution is usually employed; however, meticulous surgical technique is indicated in all operative procedures.

It has been stated that the preoperative pyelogram will disclose a 26.9% incidence of major abnormalities.[1] However, close analysis of this reported series will show only a 7% incidence of significant deviation from the normal.

There is a low but well recognized incidence of post-pyelogram mortality and morbidity. One series[2] reports 31 deaths in 3,831,850 intravenous pyelograms, while another study[3] mentions the occurrence of untoward reactions in 853 of 10,000 patients undergoing intravenous pyelography. Another series[4] of 21,525 consecutive pyelograms was reported to have no fatalities but four serious reactions requiring endotracheal intubation and other emergency measures.

It is important for all surgeons performing pelvic procedures to be aware of the indications for a pyelogram rather than routinely employing an expensive diagnostic tool which is associated with some complications and a rare mortality. It is imperative that all gynecologic surgeons be intimately familiar with the technique of opening the broad ligament and identifying the ureter. This familiarity can obviate the need for most pyelograms.

Summary

In this series the routine use of the preoperative intravenous pyelogram was of no more value than a chest x-ray or barium enema.

References

1. Roden, J.: The Value of Intravenous Pyelography Prior to Elective Gynecologic Operations, Obst. & Gynec. 82:568-570 (Sept.) 1961.
2. Pendergrass, E.: Further Consideration of Deaths and Unfavorable Sequelae Following the Administration of Contrast Media in Urography in the United States, Am. J. Roentgenol. 74:262-287 (Aug.) 1955.
3. Coleman, W.: Allergic Reactions in 10,000 Consecutive Intravenous Urographies, Southern M. J. 57:1401-1404 (Dec.) 1964.
4. Hamm, F.: Dangers of Excretory Urography, J.A.M.A. 172: 542. (Feb.), 1960.

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editorial comment

B. J. Philips, M.D.

Seldom have I read a paper in which I agree so wholeheartedly. Drs. Hartog and O'Leary have concisely evaluated a significant number of cases to prove that routine, stereotyped, preoperative diagnostic aids should be reviewed and reevaluated so that we in practice and those in teaching can ascertain their real value. They show from this study that there are not sufficient genitourinary findings to routinely advise intravenous pyelogram studies prior to pelvic surgery.

In our practice, we never use the intravenous pyelogram as a routine preoperative aid prior to gynecological surgery. My partner, Dr. J. Eugene Glenn, and I certainly use it whenever the need is indicated; however, I am sure that we all are aware of the incidence of post-pyelogram mortality and morbidity. When the intravenous pyelogram is used, there should be, as stated in the paper, good indications for its use. This should be, in my opinion, part of our medical training: to try always to have a good reason, with time permitting, preferably after careful consideration, for every study or procedure we put our patients through.

I sincerely appreciate the opportunity to comment on this paper.

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The Community Athletic Medicine Program

George O. Thomasson, M.D.

During the past 14 years the medical profession has begun to serve a more effective role in providing comprehensive care for individuals involved in sports at all levels of organization. This is exemplified on the national level by organization of the American Medical Association Committee on the Medical Aspects of Sports, and in the state by organization of a Division of Athletic Medicine at the Student Health Service of the University of Florida. This role has resulted primarily from the rapid increase in the degree of involvement of athletic participation in our society and its attendant cultural status significance. The respect afforded the individual excelling in athletics has been traditionally, and still is, significant. This is evident at the secondary school, university, and professional levels and increasingly more so at a younger age level with the organization and subsequent publicity of Little League type sports programs. Much has been said regarding the pros and cons of this evolutionary phase; however, the benefits of the well-organized and properly supervised athletic program on the physical and psychological development of the individual are becoming increasingly more accepted. Herein lies the gist of the matter. Organization and supervision must be provided at the optimal level of the resources available to each community. This is impossible with a haphazard and unorganized approach.

What then can we in Florida do to develop a program of this sort? First, we must address our selves to the three primary areas which comprise the total project: the pre-competition physical examination, provision of game and scrimmage medical attention for contact sports, and development of an effective instructional program.

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Physical Examination

The pre-competition physical examination can best be provided by adopting the concept of polyphasic medical screening. This entails the most recent development in the field of preventive medicine and insures the most comprehensive examination. Such a program is based on designing a stepwise evaluation of each individual, including measurement of blood chemistries, physiological function tests, and a detailed physical examination designed specifically for athletes. This approach utilizes the physician's and student's time most efficiently. It also insures the standardized and adequate examination of all participants. In this manner, the specialist in each appropriate area can concentrate on that portion of the program in which his experience and training is best utilized. Implementation of this concept requires only the cooperation of the community physicians interested in assuring that each individual receives the most adequate evaluation possible, and the willingness of the schools to assist in scheduling the examination.

For this program to be most effective, standard examination forms are necessary and easily designed. This provides the benefits of a meaningful method of collecting and storing information for future reference. It also insures the standardized evaluation of all athletes, regardless of the time of the particular examination. For this information to be most useful, a central filing system is necessary, with a copy of each form filed in that location and at the individual school.

Medical Coverage

Scrimmage and game medical coverage can be provided by establishing a roster of physicians to provide this service on a planned basis well in advance of the scheduled event. An alternative is to

have one physician responsible for this function at each individual school. This is preferable because of the advantage of establishing better relationships with the school administration, coaches, and team members. An opportunity also is provided to become familiar with the athletes while they are healthy, rather than only when medical care is needed. This situation is not always capable of implementation because it does demand a large amount of the physician's time. By developing a group of interested physicians to provide this service, many of the undesirable factors can be minimized. It is imperative that each physician either be familiar with the medical history of the athlete in a given group or have ready access to the pre-season history and physical records. The schools should reciprocate with necessary finances and administrative responsibility commensurate with the physician's services.

The adoption of a standard injury report form, such as that used in the Atlanta public school system, is also necessary to make this an efficient program. The form is initiated at the time of any significant injury and provides a copy for the central records system, the coach, the school administration, and the physician responsible for the definitive care of the injured athlete. It should be understood that no athlete is allowed to return to competition without presentation of such a form, clearly stating that this is medically indicated.

Development of Instructional Program

Because the coach is frequently faced with a situation in which he must participate in a health-related problem, it is imperative that his level of knowledge be equivalent to his responsibilities in this area. To implement this, the medical community through the county medical society must organize regular and comprehensive teaching conferences. This can be done by utilizing local physicians with a demonstrated interest and competence in this area of medicine, as well as other resources available to the individual community. Attendance at these meetings by all coaches and their assistants should be mandatory.

The problem of heat-related illnesses and death is quite important in this state. An effective means of assessing the risk of developing a heat-stress related problem has been described by modifying a technique developed by the United States Marine Corps at its training centers where its use is mandatory. The method requires only the reading of temperatures recorded from three standard thermometers and a simple mathematical calculation to derive an index figure. Materials to construct such a device can be found in any high school science or chemistry laboratory or it can be purchased already assembled at a small sum. This procedure should be a requirement for all practices and games held during seasons in which high temperatures and high humidities are likely.

Concomitant with this approach, a regular review of the management of an individual suffering from heat exhaustion or heat stroke is necessary. Each represents a separate medical problem for which the treatment is different and must be instituted immediately. Hence, it is imperative that each practice field and game area be equipped in a fashion to allow early and appropriate care. These problems frequently occur when no physician is in attendance and the delay in obtaining such care may significantly affect the outcome.

Basic first aid techniques should also be provided and frequently reviewed. Not only is it essential that each coach and his assistants who function as trainers be aware of this information, but the equally necessary judgment of selection of techniques must be encouraged. Instruction should be provided in recognition and early management of athletic injuries. This allows all individuals working with the athlete to understand better the significance of his problem and the reasons for subsequent medical decisions.

Associated with this is the unfortunate increase in the number of serious head and neck injuries. These are frequently associated with inadequate equipment, faulty coaching techniques, lax enforcement of rules, and misunderstanding of the potential seriousness of an injury of this type. To change this trend it is imperative that a regular review of coaching techniques be provided. For this to be most effective, the mechanism of injuries of this type should be outlined and correlated with possible preventive measures. The need for strict enforcement of rules designed to prevent injury must be frequently and forcefully emphasized and no deviation from these principles should be tolerated.

Another area gaining national interest is that of the frequency and severity of knee injuries sustained, especially in contact sports. Examples of this sort of injury are available in almost every area of the state in which organized school sports are conducted. Here again, the factors of proper equipment, proper conditioning, adequate evalua-

tion, early treatment and appropriate rehabilitative measures are extremely significant. Discussion of these factors involving coaches, trainers, and physicians will hopefully reduce the morbidity resulting from this particular injury.

The state medical society should also be active in this educational program. The establishment within each county society of a committee relating to athletic medicine should be encouraged. Regular conferences on the medical aspects of sports for physicians can be developed in this fashion. These meetings should be more technical than is generally desirable for sessions directed toward a mixed group of coaches, trainers, physical therapists, and physical educators as well as physicians. It also provides a method of disseminating medical information of interest to physicians dealing with sports problems. At present many of the literature articles occur in journals related primarily to one or another specialty. This presents the age-old problem of multiple journal review which the limitation of time and availability makes generally impractical. With the appearance of the journal "Medicine and Science in Sports" sponsored by the American College of Sports Medicine, this problem may become less acute.

Conclusion

The implementation of an in-depth athletic medicine program frequently requires stepwise development. In every area in which it has reached fruition, the benefits to the school, community, and athlete is unequivocal. More adequate detection of items requiring medical attention prior to competition provides a better opportunity to afford necessary treatment, thus insuring that the risk of athletics will not be unnecessarily high. The number of undetected or tardily treated injuries or illnesses are significantly reduced and the sequelae of untreated ailments are decreased. Such a program provides adequate records to evaluate the effectiveness of the deliverance of health care and the associated instructional programs. An associated significant development is the establishment of more effective communication between school administrators, coaches, parents, athletes, and physicians.

The resources available in this state make the good samaritan approach to the medical care of athletes undesirable. The logical alternative is the implementation of a comprehensive cooperative program to meet the existing need.

Bibliography

Batolorf, John W.: The Physician in the Community, Proceedings of Eighth National Conference on Medical Aspects of Sports, p. 61, Nov. 27, 1966.

Corbitt, Richard W.: The Medical Society Committee on Sports, ibid., p. 65.

Guide for Medical Evaluation of Contact Sports, American Medical Association publication, 1968.

Hein, Fred V.: A.M.A. Committee on Medical Aspects of Sports, Proceedings of Eighth National Conference on Medical Aspects of Sports, p. 61, Nov. 27, 1966.

Medicine in Sports, vol. 8, no. 5, September 1968.

Medicine in Sports, vol. 9, no. 1, January 1969.

Dr. Thomasson, J. Hillis Miller Health Center, Student Health Service, University of Florida, Gainesville 32601.

Annual Meeting Scientific and Educational Exhibits

Applications are now being taken for presentation of scientific and educational exhibits at the 1970 Annual Meeting of the Florida Medical Association being held May 6-10 at the Diplomat Hotel, Hollywood-by-the-Sea. The deadline for all applications is December 1, 1969. For the convenience of JOURNAL readers wishing to apply, a form which may be utilized for this purpose may be found on page 818 of this issue. Completed forms should be mailed to Gerold L. Schiebler, M.D., Chairman, Committee on Scientific Assemblies, P.O. Box 2411, Jacksonville, Florida 32203.



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Amitriptyline: Careful observation of all patients recommended. Side effects include drowsiness (may occur within the first few days of therapy); dizziness; nausea; excitement; hypotension; fainting; fine tremor jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, includ peripheral neuropathy; activation of latent schizophren (however, the perphenazine content may prevent this reaction in some cases); epileptiform seizures in chron schizophrenics; temporary confusion, disturbed concentration, or transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of mouth, blurring of vision, urina retention, constipation, paralytic ileus; agranulocytosis jaundice. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lowe dosage levels.

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We wish to thank Drs. Marcia K. Bilbao, Louis H. Frische, Josef Rösch and Charles T. Dotter for this exceptionally graphic example of hypotonic duodenography.

Contraindications: Glaucoma, severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in elderly men with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug. Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

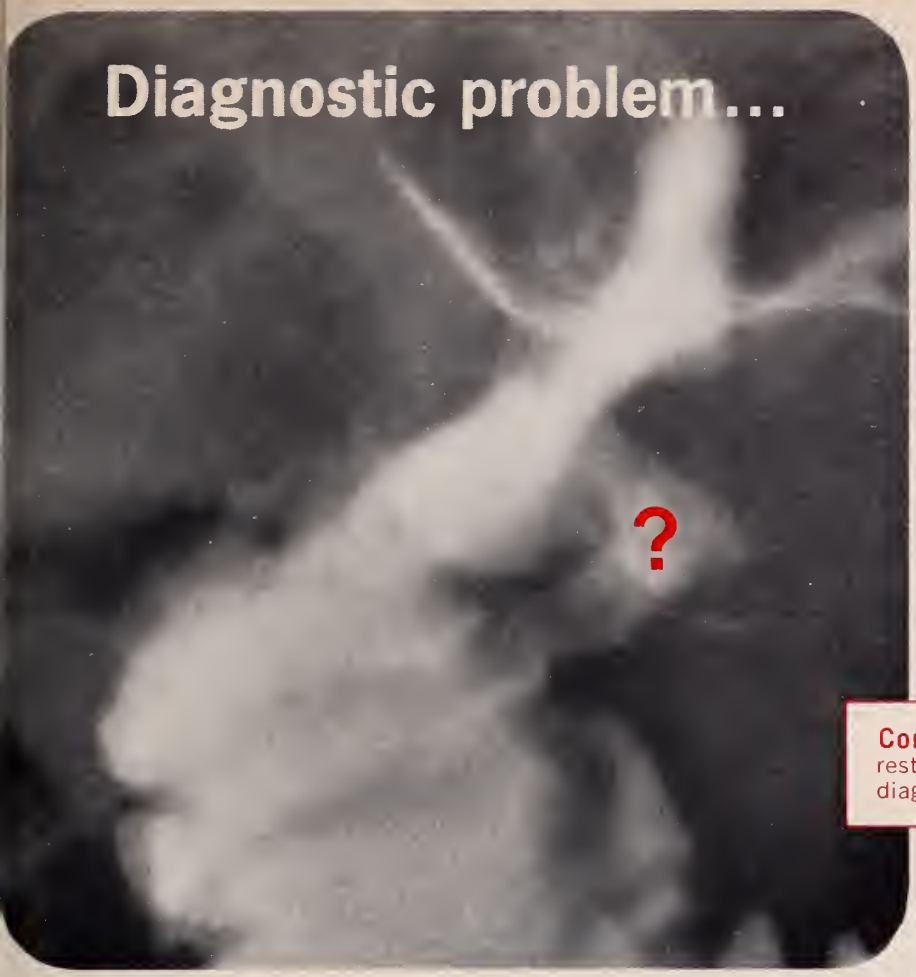
Side Effects: The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

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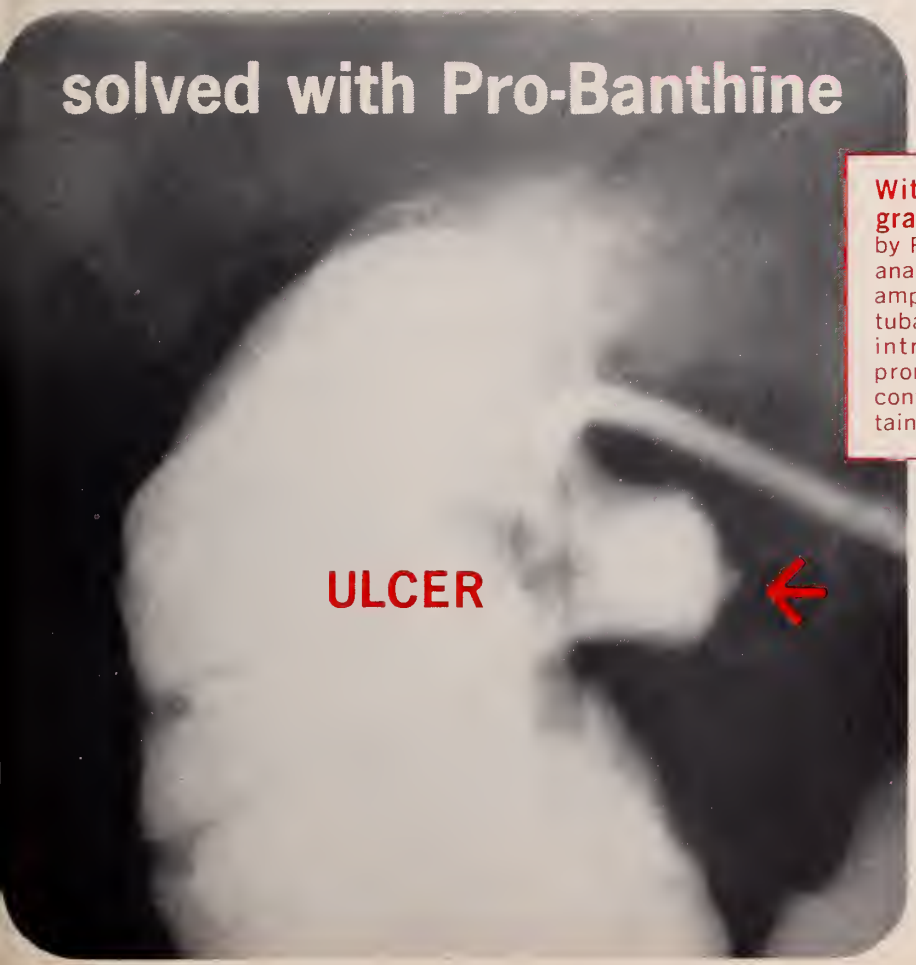
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Florida Medical | editorial

From the Editor

Franz Stewart

Death—A Concept to Reconsider

The concept of death must have been sharp and clear to early man. The strongest hunter, for man or beast, was struck down suddenly by a blow on the head or gash from a tiger's paw. A man was alive, and then he was dead.

Death became the enemy of life, a black of night thing, and a finite being as real as life itself. Through civilizations this concept of death as a sudden visitation, a specific point in time, has become a part of our being, even our religion.

The coming of death crowned the new king, fixed the legal transfer of authority or inheritance, and has become a clear and important part of the law of the land and social custom. In this concept, death is considered an arrival, the announcement of which the physician is expected to make.

Life begins and life ends, but who can mark either point without certainty of contradiction? There is no clear measurable or factual point to choose for either, without simply a temporary intellectual agreement or interpretation of custom. We can search for some sign of beginning or ending, for the loss of this or that vital organ, but no simple indication of death can exist. A part of the body can die, most of it or all of it, but the decision of the arrival of death must be by the definition set down by custom and is not a scientific or physiologic decision. We have no such definition today. We can call on our faith and speak of the escape of the soul, but this does not help the doctor measure the arrival of death at the bedside.

There must be a way of deciding when legal life ends, but this must be a definition developed by society, by law, by mutual agreement, and not by the concept of an arrival to be recognized medically. The concept of death in use today is a medical term. Death in this concept does not exist.

Death is Life

Death and life belong to each other, nurture each other and color each other. Death is what each life paints it to be. Friend, enemy; deliverer, executioner; voyager, a picture not unveiled.

Life thrives upon a trellis of change. Grabbing firmly a fixed point here, holding to an assurance of permanence, struggling hard for security, fighting against and again searching for change.

Death is the ultimate change in life. Death gives to life an urgency, an impermanence, a certainty of change. It is this gift of death that gives life its meaning, its display of courage, its love, its poignancy.

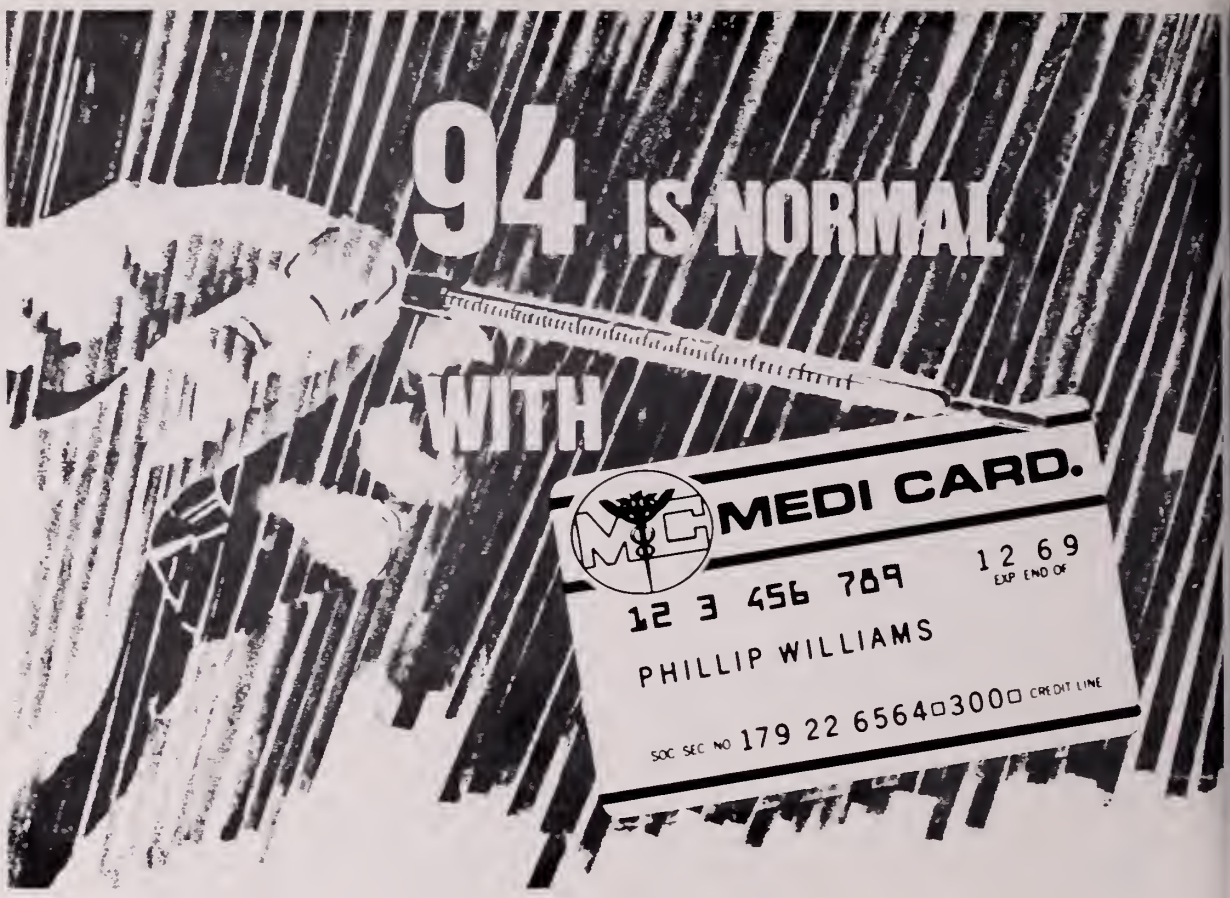
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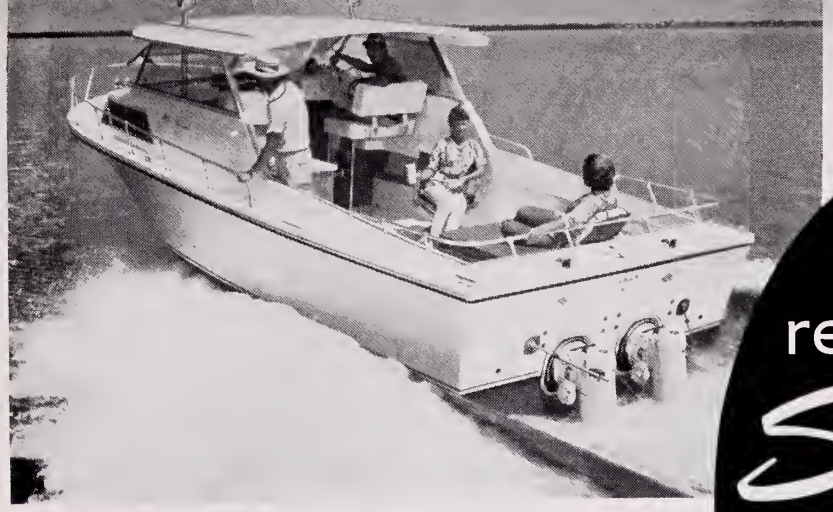
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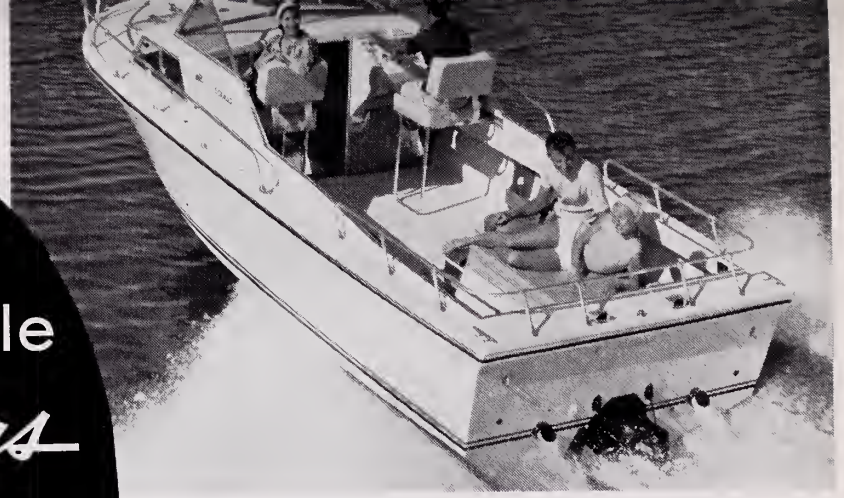
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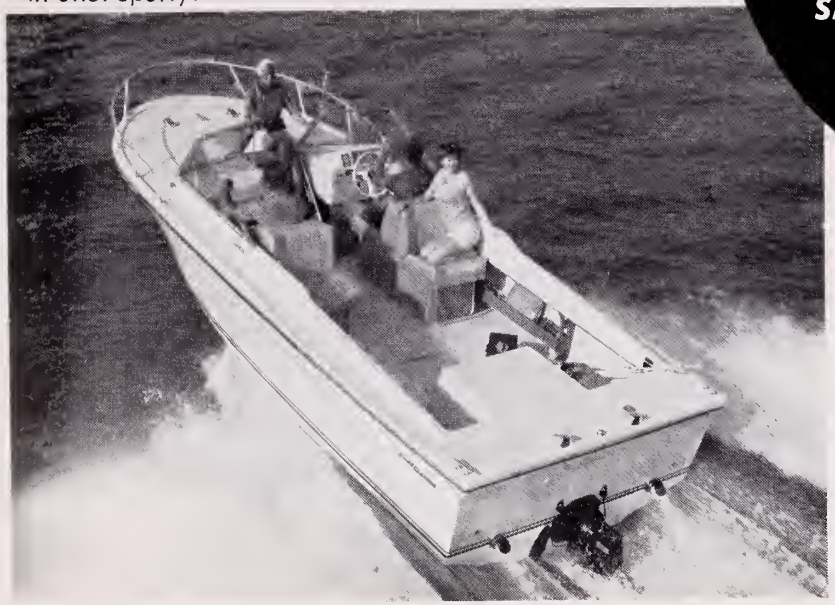
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Warnings: Administer cautiously to patients who have previously exhibited a hypersensitivity reaction (e.g., blood dyscrasias, jaundice) to phenothiazines. Phenothiazines are capable of potentiating central nervous system depressants (e.g., anesthetics, opiates, alcohol, etc.) as well as atropine and phosphorus insecticides. During pregnancy, administer only when necessary.

Precautions: There have been infrequent reports of leukopenia and/or agranulocytosis and convulsive seizures. In epileptic patients, anticonvulsant medication should also be maintained. Pigmentary retinopathy may be avoided by remaining within the recommended limits of dosage. Administer cautiously to patients participating in activities requiring complete mental alertness (e.g., driving). Orthostatic hypotension is more common in females than in males. Do not use epinephrine in treating drug-induced hypotension. Daily doses in excess of 300 mg. should be used only in severe neuropsychiatric conditions.

Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

SANDOZ PHARMACEUTICALS, HANOVER, N.J. SANDOZ 69-384

Mild ulcerative colitis may be triggered here...



In mild ulcerative colitis, a number of factors can precipitate an attack: for instance, dietary indiscretion, such as eating raw foods, or emotional overreaction, such as that aroused by financial difficulties. No matter what causes the patient's sensitive colon to "act up," he soon suffers from acute discomfort...and often, from anxiety and apprehension as well. Such patients frequently respond well to adjunctive dual-action Librax® therapy.

Librax combines, in a single convenient capsule, the well-known antianxiety effect of Librium® (chlordiazepoxide HCl) and the dependable anticholinergic /antispasmodic effect of Quarzan® (clidinium Br). Therefore, as Librax helps to relieve the patient's excessive anxiety and reduce his overreaction to stress, it also, at the same time, helps to control hypersecretion and hypermotility, thus relieving spasm and abdominal discomfort.

With Librax, the dosage schedule is simple: 1 or 2 capsules, t.i.d. or q.i.d., will in most cases bring the patient significant relief of both the emotional and physical elements that contribute to his psychovisceral disorder.

Before prescribing, please consult complete product information, a summary of which follows.

INDICATIONS: Indicated as adjunctive therapy to control emotional and somatic factors in gastrointestinal disorders.

CONTRAINDICATIONS: Patients with glaucoma; prostatic hypertrophy and benign bladder neck obstruction; known hypersensitivity to chlordiazepoxide HCl and/or clidinium bromide.

WARNINGS: Caution patients about possible combined effects with alcohol and other C depressants. As with all CNS-acting drugs, c tion patients against hazardous occupations quiring complete mental alertness (*e.g.*, operat machinery, driving). Though physical and p chological dependence have rarely been repor on recommended doses, use caution in ministering Librium (chlordiazepoxide hyc chloride) to known addiction-prone individu or those who might increase dosage; withdra symptoms (including convulsions), follow discontinuation of the drug and similar to th seen with barbiturates, have been reported. U of any drug in pregnancy, lactation, or in wom of childbearing age requires that its poten benefits be weighed against its possible hazar As with all anticholinergic drugs, an inhibit effect on lactation may occur.

PRECAUTIONS: In elderly and debilitat limit dosage to smallest effective amount to p clude development of ataxia, oversedation confusion (not more than two capsules per d initially; increase gradually as needed and tol

or here.



ed). Though generally not recommended, if ombination therapy with other psychotropics ems indicated, carefully consider individual harmacologic effects, particularly in use of po- ntiating drugs such as MAO inhibitors and henothiazines. Observe usual precautions in resence of impaired renal or hepatic function. aradoxical reactions (*e.g.*, excitement, stimula- on and acute rage) have been reported in psy- hiatric patients. Employ usual precautions in eatment of anxiety states with evidence of im- ending depression; suicidal tendencies may be resent and protective measures necessary. Vari- ble effects on blood coagulation have been ported very rarely in patients receiving the rug and oral anticoagulants; causal relation- hip has not been established clinically.

ADVERSE REACTIONS: No side effects or anifestations not seen with either compound one have been reported with Librax. When hlordiazepoxide hydrochloride is used alone, rowsiness, ataxia and confusion may occur, specially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally with chlordiazepoxide hydrochloride, making periodic blood counts and liver-function tests advisable during protracted therapy. Adverse effects reported with Librax are typical of anticholinergic agents, *i.e.*, dryness of mouth, blurring of vision, urinary hesitancy and constipation. Constipation has occurred most often when Librax therapy is combined with other spasmolytics and/or low residue diet.

two good reasons for prescribing LIBRAX®

Each capsule contains 5 mg chlordiazepoxide HCl and 2.5 mg clidinium Br.

ROCHE
LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

heavenly relief
for unearthly cough

Benylin®
EXPECTORANT



Each fluidounce contains: 80 mg. Benadryl® (diphenhydramine hydrochloride, Parke-Davis); 12 grains ammonium chloride; 5 grains sodium citrate; 2 grains chloroform; 1/10 grain menthol; and 5% alcohol.

An antitussive and expectorant for control of coughs due to colds or of allergic origin, BENYLIN EXPECTORANT is the leading cough preparation of its kind.

BENYLIN EXPECTORANT tends to inhibit cough reflex... soothes irritated throat membranes. And its not-too-sweet, pleasant raspberry flavor makes BENYLIN EXPECTORANT easy to take.

PRECAUTIONS: Persons who have become drowsy on this or other antihistamine-containing drugs, or whose tolerance is not known, should not drive vehicles or engage in other activities requiring keen response while using this preparation. Hypnotics, sedatives, or tranquilizers if used with BENYLIN EXPECTORANT should be prescribed with caution because of possible additive effect. Diphenhydramine has an atropine-like action which should be considered when prescribing BENYLIN EXPECTORANT.

ADVERSE REACTIONS: Side reactions may affect the nervous, gastrointestinal, and cardiovascular systems. Drowsiness, dizziness, dryness of the mouth, nausea, nervousness, palpitation, and blurring of vision have been reported. Allergic reactions may occur.

PACKAGING: Bottles of 4 oz., 16 oz., and 1 gal.

Parke, Davis & Company
Detroit, Michigan 48232

PARKE-DAVIS

410R69

The AMBAR® SCRAPBOOK of

Obesity Oddities

FACT & LEGEND

OBESITY WAS A MILITARY OFFENSE!

OVERWEIGHT ROMAN HORSEMEN WERE MADE TO FORFEIT THEIR MOUNTS AND BECOME FOOT SOLDIERS!

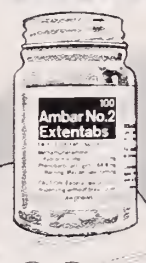


RECORDED ON AN ENGLISHMAN'S TOMBSTONE

JAMES PARSON
DIED 1743
HE HAD OFTEN EATEN A WHOLE SHOULDER OF MUTTON AND A PECK OF HASTY PUDDING

SHAKESPEARE WAS AWARE OF THE DANGERS OF OBESITY HE WROTE...

Make less thy body hence and more thy grace, leave gormandizing; know thy grave doth gape for thee wider than for other men.



THE COST OF AMBAR EXTENTABS IS APPROXIMATELY ONE HALF THAT OF OTHER LEADING APPETITE SUPPRESSANTS

AN IMPORTANT FACTOR IN LONG TERM THERAPY

ONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS

methamphetamine HCl 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

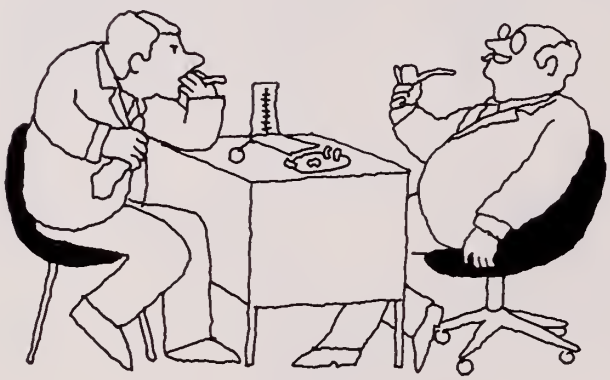
ne Ambar Extentab before breakfast can elp control most patients' appetite for up 12 hours. Methamphetamine, the appete suppressant, gently elevates mood and elps overcome dieting frustrations. Phenoarbital, the sedative in Ambar, controls irritability and nxiety...helps maintain a state of mental calm and equaimity. Both work together to ease the tensions that erode ne willpower during periods of dieting.

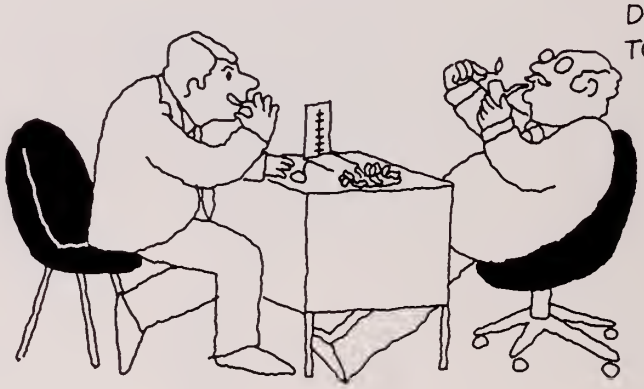
Also available: Ambar #1 Extentabs®—methamphetamine ydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warng: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY, RICHMOND, VA. 23220 A·H·ROBINS

The Apprehensive Hypertensive



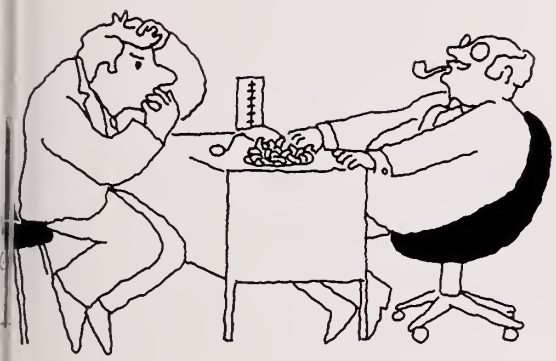


Regroton® to lower blood pressu

chlorthalidone 50 mg.
reserpine U.S.P. 0.25 mg.

Regroton®: chlorthalidone 50 mg., reserpine U.S.P. 0.25 mg.
Indications: Hypertension. *Contraindications:* History of mental depression, hypersensitivity, and most cases of severe renal or hepatic diseases. *Warning:* With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small-bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue coated potassium-containing formulations immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur. Discontinue one week before electroshock therapy, and if depression or peptic ulcer occurs. *Use in pregnancy:* Because chlorthalidone may cross the placental barrier and appear in cord blood and thiazides may appear in breast milk, this drug should be used with care in pregnant patients and nursing mothers. When used in women of childbearing age, the potential benefits of the drug should be weighed against the possible hazards to the fetus. Use of chlorthalidone may result in fetal or neonatal jaundice, thrombocytopenia, and possibly other adverse reactions which have occurred in the adult r respiratory secretions, nasal congestion, cyanosis and ar occur in infants born to reserpine-treated mothers. *Precauti* pertensive therapy with this drug should always be initiated in postsympathectomy patients and in patients receiving blocking agents, other potent antihypertensive drugs, or cura dosage of concomitant antihypertensive agents by at least avoid hypotension during surgery, discontinue therapy with two weeks prior to elective surgical procedures. In emerger use, if needed, anticholinergic or adrenergic drugs or other measures as indicated. Because of the possibility of pro renal damage, periodic kidney function tests are indicated. if the BUN rises or liver dysfunction is aggravated. Hepatic be precipitated. Electrolyte imbalance, sodium and/or po pletion may occur. If potassium depletion should occur dur the drug should be discontinued and potassium supplem provided the patient does not have marked oliguria. Take pa in cirrhosis or severe ischemic heart disease and in patien

WE'VE GOT TO GET PLENTY OF REST AND TRY TO AVOID SITUATIONS THAT MAKE US ANXIOUS OR TENSE. AND WE'LL TAKE MEDICINE TO LOWER OUR BLOOD PRESSURE AND CALM US DOWN.



WE'VE GOT PROBLEMS.



nd allay anxiety in hypertension

eroids, ACTH, or digitalis. Severe salt restriction is not recom- Use cautiously in patients with ulcerative colitis or gallstones colic may be precipitated). Bronchial asthma may occur in ble patients. *Adverse Reactions:* The drug is generally well . The most frequent side effects are nausea, gastric irritation, , diarrhea, constipation, muscle cramps, headache, dizziness te gout. Other potential side effects include angina pectoris, depression, bradycardia and ectopic cardiac rhythms (espe- nen used with digitalis), drowsiness, dull sensorium, hypergly- nd glycosuria, hyperuricemia, lassitude, restlessness, transient impotence or dysuria, orthostatic hypotension which may be ted when chlorthalidone is combined with alcohol, barbiturates otics, leukopenia, aplastic anemia, skin rashes, thrombocyto- granulocytosis, nasal stuffiness, increased gastric secretions, re, purpura, urticaria, ecchymosis, weakness, uveitis, optic and glaucoma, and pruritus. Eruptions and/or flushing of the reversible paralysis agitans-like syndrome, blurred vision, con- injection, increased susceptibility to colds, dyspnea, weight gain, decreased libido, dryness of the mouth, deafness, anorexia, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Jaundice, xanthopsia, paresthesia, photosensitization and necrotizing angiitis are possible. *Average Dosage:* One tablet daily with breakfast. *Availability:* Pink, single-scored tablets in bottles of 100 and 1000. (B) 46-600-C

For details, please see complete prescribing information.

Regroton®
chlorthalidone 50 mg.
reserpine U.S.P. 0.25 mg.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York 10502

RE-6742

One of the best things you can do for the cold sufferer



Ornade® Spansule®

brand of sustained release capsules

Trademark

Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate); 50 mg. of phenylpropanolamine hydrochloride; 2.5 mg. of isopropamide, as the iodide.

Prompt relief from nasal congestion and hypersecretion due to colds.

Before prescribing, see complete prescribing information in SK&F literature or *PDR*

Contraindications: Glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction.

Precautions: Use cautiously in the presence of hypertension, hyperthyroidism, coronary artery disease; warn vehicle or machine operators of possible drowsiness.

Usage In Pregnancy: Use in pregnancy, nursing mothers and women who might bear children only when potential benefits have been weighed against possible hazards.

Note: The iodine in isopropamide iodide may alter PBI test results and will suppress I^{131} uptake; discontinue 'Ornade' one week before these tests.

Adverse Reactions: Drowsiness; excessive dryness of nose, throat or mouth; nervousness; insomnia. Other known possible adverse reactions of the individual ingredients: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, incoordination, tremor, difficulty in urination. Thrombocytopenia, leukopenia and convulsions have been reported.

Supplied: Bottles of 50 capsules.

One capsule q12h for round-the-clock relief

SK&F **Smith Kline & French Laboratories**

Because any urologic infection can be serious. BREON introduces potent therapy

for the strong start and a fast finish...

"...a significant gap appears to have been closed in the armory of drugs available to the urologist."[1]
Bacteriuria and symptoms can be eliminated within 48 to 72 hours; susceptible infection often in 10 to 14 days.

before your "minor" becomes a major problem

choice initial treatment for urinary infections

Cybis® (nalidixic acid) provides prompt broad gram-negative bactericidal activity at normal urinary pH range that can eradicate troublesome *E. coli,* Aerobacter and Proteus. A good starting drug, it can effectively accelerate management of infection due to sensitive organisms.

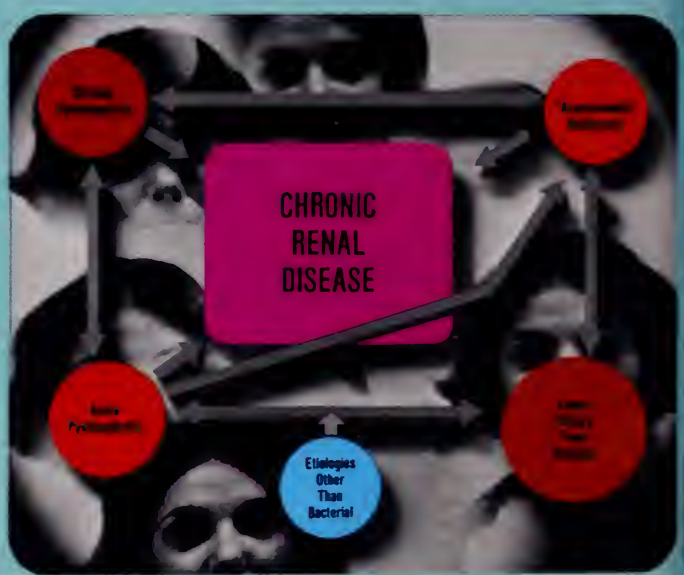
essential control within the primary 72-hour cycle

In cases of acute infection due to susceptible organisms, Cybis works well toward the rapid clearing of disease when obstruction is absent or can be relieved. Within 48 to 72 hours, symptoms are frequently eased and bacteriuria eliminated. Susceptible infection is often eradicated in 10 to 14 days.

blocks the young female progression of infection

Cybis can be useful in naturally susceptible young female patients with new or well-established urinary disturbances. Combining rapid potency with relative freedom of serious side reactions and toxicity, the drug can be of particular value in preventing higher tract involvement or blocking the possible continuum of disease. (See Chart)

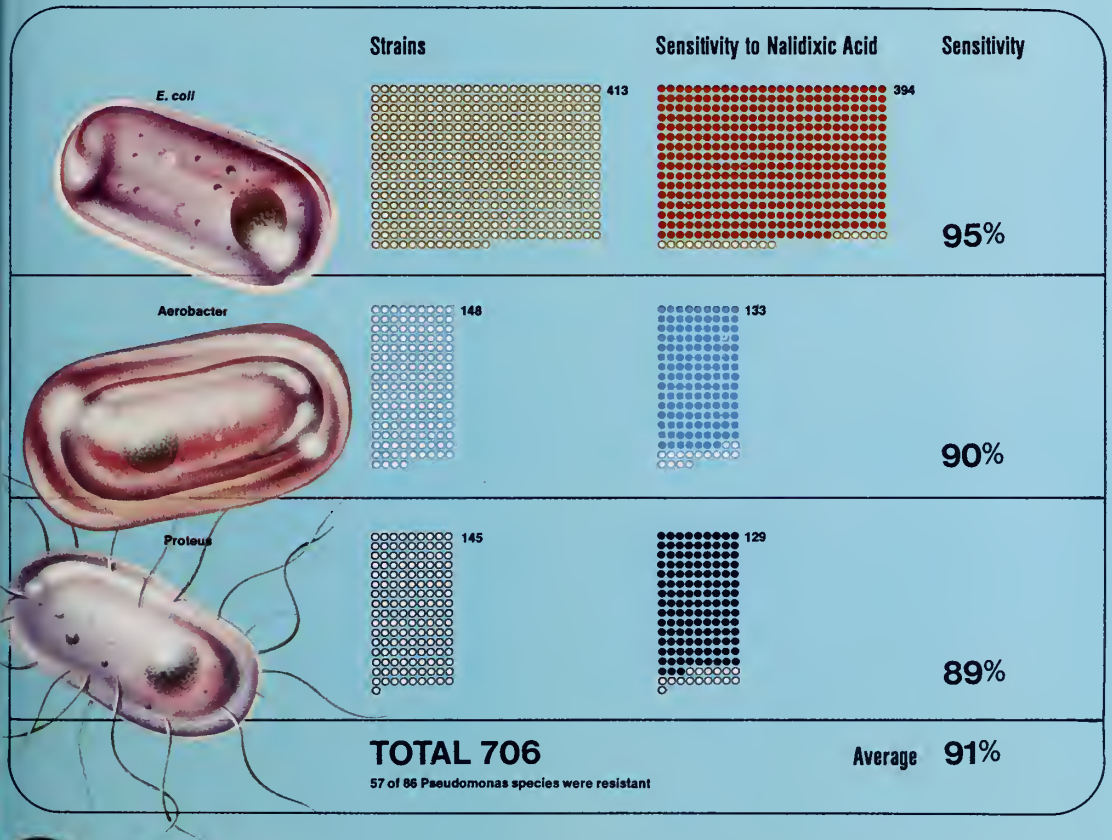
Kinetic Relationship of Acute and Chronic Bacterial Pyelonephritis to Chronic Renal Disease[2]



consistent activity against 706 gram-negative strains

In vitro testing of *E. coli*, Aerobacter and Proteus species showed better than 90% sensitivity to nalidixic acid.[3] (See Table)

Better Than 90% Sensitivity Among 3 Common Urinary Invaders



References: 1. Reimann-Hunziker, R. and Reimann-Hunziker, G. J.: *Praxis* 53:15, Jan. 9, 1964. 2. Sanford, J. P.: *Med. Times* 96:715, July 1968. 3. Reese, L.: *Canad. M. A. J.* 92:394-397, Feb. 20, 1965.

Cybis®
(nalidixic acid)

for the strong start and a fast finish... in cystitis, pyelonephritis, prostatitis, urethritis

Before prescribing, please consult complete product information, a summary of which follows on the next page, including indications, warning, precautions, adverse reactions and dosage.

Summary of prescribing information

Indications: Urinary tract infections in which species of sensitive gram-negative bacteria are predominant, particularly *Proteus, Escherichia coli, Aerobacter, Klebsiella,* and certain strains of *Pseudomonas.* Gram-positive bacteria are less sensitive to Cybis but favorable clinical results have been observed.

Warning: Use in Pregnancy. This drug is not recommended in the first trimester of pregnancy. However, it has been used in several patients during the last two trimesters without producing apparent ill effects in either mother or fetus.

Precautions: Although prolonged treatment with Cybis has been generally well tolerated, as with all new drugs it is advisable to carry out blood, renal, and liver function tests periodically if treatment is continued for more than one or two weeks. The dosage recommended for adults and children should not be arbitrarily doubled unless under the careful supervision of a physician. **It should be used with caution in patients with liver disease, epilepsy, or severe cerebral arteriosclerosis, and in patients in whom kidney function is severely impaired.** Patients should be cautioned to avoid unnecessary exposure to direct sunlight while receiving Cybis and, if a photosensitivity reaction occurs, therapy should be discontinued.

During treatment microorganisms may develop resistance to this drug. Resistant bacteria, not previously present or identified, may emerge. Cultures should be taken and bacterial sensitivity tests made periodically, particularly if the clinical response is unsatisfactory or if a relapse occurs. Should resistance develop, other specific chemotherapy should be instituted; no cross resistance has been observed. If new strains of bacteria that are not sensitive emerge, other effective antibacterial agents may be added. When Benedict's or Fehling's solutions or Clinitest® Reagent Tablets are used to test the urine of patients taking Cybis, a false-positive reaction for glucose may be obtained due to the liberation of glucuronic acid from the metabolites excreted. However, a colorimetric test for glucose based on an enzyme reaction (using, for example, Clinistix® Reagent Strips or Tes-Tape®) does not give a false-positive reaction to Cybis glucuronide.

Adverse reactions: Mainly mild nausea, vomiting, and other gastrointestinal disturbances: less frequently, sleepiness, drowsiness, weakness, headache, dizziness and vertigo, and rarely cholestasis, paresthesia, thrombocytopenia, leukopenia, or hemolytic anemia which in some patients may have been associated with deficiency in activity of glucose-6-phosphate dehydrogenase. Itching, pruritus, rash, urticaria, mild eosinophilia, reversible photosensitivity reactions primarily involving exposed surfaces, and reversible subjective visual disturbances (overbrightness of lights, change in visual color perception, difficulty in focusing, decrease in visual acuity and double vision), occurred occasionally. Reversible increased intracranial pressure with bulging anterior fontanel, papilledema, and headache have been observed occasionally in infants and children. Toxic psychosis and brief convulsions (the latter generally in patients with possible predisposir factors, and both usually associated with excessive dosage) have been recorded in rare instances.

Dosage and administration: *Adults*—Four Gm. d by mouth (2 tablets of 500 mg. four times daily) for c to two weeks. Thereafter, if prolonged treatment is indicated, the dosage may be reduced to two Gm. d (1 tablet of 500 mg. four times daily). *Children*— According to age and weight: approximately *25 mg per pound* of body weight per day, administered in divided doses.

Note: The dosage recommended above for adults a children should not arbitrarily be doubled unless ur the careful supervision of a physician. Until further experience is gained, infants under 1 month should be treated with the drug.

How supplied: Tablets of 500 mg., bottles of 50.

Before prescribing, please refer to complete prescribing information.

Cybis®

(nalidixic acid)

for the strong start and a fast finish... in cystitis pyelonephritis prostatitis urethritis

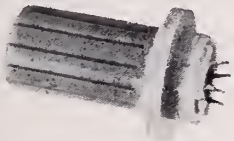


BREON

BREON LABORATORIES INC.
90 Park Avenue, New York, N.Y. 10016
Subsidiary of Sterling Drug Inc.

TB is still around.

In 1967 almost 45,000 new active cases were reported. Isn't that a good reason to make tuberculin testing with the white LEDERTINE™ Applicator a routine part of your physical examinations?



TUBERCULIN TINE TEST
(Rosenthal) with Old Tuberculin

Precautions: With a positive reaction, consider further diagnostic procedures. Use with caution in persons with active tuberculosis or known allergy to acacia. Vesiculation, ulceration, or necrosis may occur at the test site in highly sensitive persons.

Lederle LEDERLE LABORATORIES
A Division of American Cyanamid Company, Pearl River, N.Y.
472-9

Taste!

Dicarbosil.®
ANTACID

Your ulcer patients and others will love it. Specify DICARBOSIL 144's—144 tablets in 12 rolls.

ARCH LABORATORIES
319 South Fourth Street, St. Louis, Missouri 63102

TUCKER HOSPITAL, INC.

212 West Franklin Street
Richmond, Virginia

A private hospital for diagnosis and treatment of psychiatric and neurological disorders. Hospital and out-patient services.

James Asa Shield, M.D.
George S. Fultz, Jr., M.D.
Catherine T. Ray, M.D.

Weir M. Tucker, M.D.
Edward W. Gamble, III, M.D.
Gerald W. Atkinson, M.D.

Those Women

Marion S. Gilliland
(Mrs. C. H.)

I enjoyed this delightful visit and have a hunch you'll watch for this bunch.—Ed.

You have met your Auxiliary, singly and in groups, but how well do you know us? It is sometimes suspected that you like us well enough individually, but don't quite know what to do with us in bunches. You are attentive to us singly, but in groups you brush us off as "those women."

One of my major aims this year as president of the Woman's Auxiliary to the Florida Medical Association is to better acquaint you with what we do, what we *can* do, and the purposes for which we were organized in the first place.

The Woman's Auxiliary to the American Medical Association was organized May 26, 1922, in St. Louis, Missouri. Twenty-four women from nine states attended the organizational meeting. State auxiliaries already organized at that time were Texas, Oklahoma, South Dakota, Maine, Minnesota and Montana.

Your Florida Auxiliary was organized in 1926, with Mrs. Wilburn Lassiter of Gainesville serving as its first president. We are organized and incorporated for the following purposes: (a) To cultivate friendly relations and to promote mutual understanding among the families of medical doctors, (b) To coordinate and advise concerning the activities of chartered component auxiliaries (the counties), (c) To recruit and promote interest of students in or for medical education or for careers in any of the allied medical professions and through educational and informational programs to encourage participation of the lay public in the same, (d) To carry on projects and programs under the advice of an advisory committee from the Florida Medical Association, Inc. to the end that philanthropic and educational programs may be conducted to assist in the betterment of the health and health needs of the people of Florida, and (e) To receive and disburse gifts for the promotion of the objects and purposes of the corporation.

All of that puts it in a very businesslike form and I can just hear you say, "Hmmmph! So?" So—let me change the lyrics a little. First of all, when it looks as though we are just having a good time, well, we are, but we are also busily cultivating those good relations between families of medical doctors. You know very well that you send patients to Dr. Joe Blow because you know him and like him as well as because he is a competent physician. Well, oftentimes our friends go to our husbands because they know us, and that works not just for our medical family friends, but for our lay friends as well. Then, too, a friendly relationship between wives does help to promote a friendly relationship between their husbands. A group whose members know one another well and like one another well is a cohesive force with multiplied strength for whatever it chooses to do. We need that kind of strength today.

There is an added dividend to good internal relations. They are reflected in our public relations. When we know each other and like each other, the public is aware of this and they like us better too. This is one of the most important reasons for the existence of the Auxiliary, and one of the best reasons for organizing one in the unorganized counties. We hear things like, "We are such a small group we really can't *do* anything." By "do" anything they are thinking in terms of projects and fund-raising rather than in terms of public relations and community service. And community service in the name of the Medical Auxiliary

Mrs. Gilliland is president, Woman's Auxiliary to the Florida Medical Association.

is public relations—good ones! It doesn't take a large membership to make a good impression.

The state officers and chairman of the Auxiliary serve as the advisory and coordinating body for the component county auxiliaries and the national officers and chairmen serve the same function for the component state auxiliaries, with much the same organization as the American Medical Association and its component state associations.

National leaders of the Auxiliary serve as members, or participate in activities, of such bodies as the President's Committee on Employment of the Handicapped, Division of Health Mobilization, U. S. Department of H.E.W.; Home Health Agency Advisory Committee to the Social Security Administration; Women's Activities Conference of the National Safety Council; Committee on Careers, National League for Nursing; national and state health councils; National Council for Homemaker Services; national voluntary health agencies, and state governors' commissions and committees. And early this year our late president, Mrs. C. C. Long, was one of six prominent American women who spent two weeks in France as guests of the French government.

For many years on national, state and local levels we have vigorously recruited personnel for careers in allied health professions. Dr. Wilbur tells us it will be necessary for one of every seven high school graduates to enter some health-related field if the future demand for health services is to be met. There must be additional teaching facilities and expansion of existing ones. We, as an Auxiliary, cannot do much about furnishing additional teaching facilities. That is largely up to legislative bodies and to you in the medical profession. But we *can* certainly continue to help recruit personnel for the expanded facilities and encourage contributions and appropriations to support them. And we *can* continue to help furnish scholarships for worthy, but needy, students to keep them in school. We, as well as you, have had a scholarship loan program for many years on both state and county levels. Nationally, we have already furnished over $3,000,000 in unrestricted grants to medical schools and loans to students, and another $4,000,000 for health career financing.

As other projects approved by the FMA and carried out successfully by your state Auxiliary we have trained safe and reliable baby sitters; we have sponsored defensive driving courses; we were active, personally and financially, in political campaigns and in sponsoring legislation. We sponsored public education programs on drug abuse and alcohol and promoted proper sex education for our youth. We helped send medicines, books, and supplies to overseas areas of medical need through our International Health Activities committee. These are continuing programs. We do these things together as a group, and this is good public relations for organized medicine. We know that we need to be ever aware of the public image we project.

Only Supreme Court justices are said to rank higher than doctors in opinion-making. Because we are your wives, we share some of this power. And when the public adores you as individuals but deplores you as an organized group whose only thought is fee collecting and they blame you for the high cost of everything medical, we can help to straighten out their thinking. We do this verbally, but we do this silently also through our community service as an organized Auxiliary.

Dr. Wilbur called the Auxiliary the "Diplomatic Corps of Medicine." In the May/June, 1969 issue of *PR Doctor* the Auxiliary is referred to as "full-time PR partners and help-mates." Philip Lesley, president of the AMA's PR firm, suggested that the Auxiliary functions as the community eyes and ears, and sometimes the voice, of their doctor husbands. Many of you, because of the nature of your practices, are unable to exercise your voice in public affairs, so many of your wives do this in your stead.

Dr. Trainer, associate professor of physiology and medicine at the University of Oregon Medical School, said that men as a group have more trouble with communication than women. He says women talk more, faster, longer (and I bet you agree with him heartily thus far!) and better than men. He suggests that perhaps this is why so many Auxiliarians have been invited as members on or advisors to governmental and voluntary agencies dealing with health problems. So you see, while you turn us off as a "kaffee klatsch" someone else has sometimes heard our words, not just our voices. We have been communicating, and communication is the key to the success of all we do.

Are you secretly afraid of us as a group? You needn't be. We are on your side, so communicate with us. You will find us ready, willing and able to do your every bidding in vigorous and enthusiastic support of you and the medical profession.

▶ Mrs. Gilliland, 324 N.W. 24th Street, Gainesville 32601.

Our Mail

Dear Editor:

We are currently receiving a much appreciated complimentary copy of the JOURNAL, which is added to our permanent collection. This library has been receiving many requests from out of state and overseas for copies of this journal, e.g., California, South Carolina, and Czechoslovakia. These requesting libraries all offer various publications in exchange, and incidentally pay it many fine compliments.

As this university publishes no medical journal and the funds for the Health Center Library are quite limited, we are writing in the hope that you might be able to furnish us with a few surplus copies of your journal on a regular basis. Currency is no problem; some of our journals are up to one year old when we receive them. If this were possible it would seem to be of benefit to us all. It would make available to the medical profession heretofore unobtainable publications, while at the same time make the Florida JOURNAL even more well known throughout the world.

We hope that you will be able to view our proposal favorably and look forward to a reply at your convenience.

JUAN E. TERRY, ACQUISITIONS LIBRARIAN
J. HILLIS MILLER HEALTH CENTER
UNIVERSITY OF FLORIDA
GAINESVILLE

Dear Mr. Terry:

We are delighted to learn that you are receiving exchange requests for our JOURNAL, and are glad of the opportunity in this way to help increase the number of publications available to the physicians of Florida and to others who avail themselves of the library of the University of Florida.

Please let us have any letters which comment on our JOURNAL so we may send copies to you and at the same time gain this chance to study reader response to help us improve.

FRANZ H. STEWART, M.D.
EDITOR

Dear Editor:

I have received the August issue of the JOURNAL, addressed to me as past president of the Florida Historical Society, and I wish to thank you for again including me on your mailing list for another interesting and informative historical issue.

Your publication is making a substantial contribution to Florida history, and I am happy to have the August historical issues to add to my collection of Floridiana after they have provided me with enjoyment and information.

WILLIAM M. GOZA
CLEARWATER

Dear Editor:

I have looked through and read several articles in the August JOURNAL.

Please accept my sincere appreciation and congratulations for a beautiful issue.

JOHN E. CUNIO, M.D.
CORAL GABLES

Dear Editor:

Doctors are undoubtedly familiar with the Social Security forms titled "Applicant's Request for Medical Information." The Social Security Administration realizes that the preparation of these reports consumes a large measure of your time.

The "Medical Report" is supplied for the doctor's convenience in describing the claimant's condition. It is not necessary to use this form. You may, if you wish, submit photocopies of your records. We would still want the copies to show history, physical and laboratory findings, clinical course, therapy and response.

LEWIS S. GOSSETTE, DISTRICT MANAGER
SOCIAL SECURITY ADMINISTRATION
JACKSONVILLE

Dear Editor:

I enjoyed reading Dr. Clyde Collins' editorial entitled "Our Annual Meeting" in the August issue of the JOURNAL.

Very few of our members realize the amount of work which goes on, the number of hours that are spent, and the careful thought that goes into the workings of our Annual Meeting.

I thought that the editorial was well written and covered the many facets of the meeting.

All is not "fun and sun" as you very well pointed out.

WILLIAM W. THOMPSON, M.D.
FORT WALTON BEACH

Dear Editor:

I wish to call your attention to an error in the listing of organizations on page 571 of the JOURNAL's July issue.

The first of two listings of "Otolaryngology Society" should read "Orthopedic Society."

I am sure the Society would appreciate a correction.

ALBERT A. WILSON, M.D., SECRETARY
FLORIDA ORTHOPEDIC SOCIETY
TAMPA

Sorry, we goofed! We should know the difference between an orthopedist and an otolaryngologist. No slight intended! —Ed.

Dear Editor:

The editors of *Modern Medicine* would like to abstract an article by Drs. Mobin-Uddin and Jude on "Vena Cava Umbrella for Prevention of Pulmonary Embolism" published in the JOURNAL, Vol. 56, No. 7, July 1969, page 476, with illustrations.

Contingent on permission being obtained directly from the authors, may we also have your permission to reproduce Figure 1 on page 476?

Thank you.

WENDELL WEED
MODERN MEDICINE
MINNEAPOLIS, MINNESOTA

Dear Mr. Weed:

We are very pleased to grant permission to *Modern Medicine* to abstract the article. This permission would extend to reproduction of figure one on page 476.

The entire permission, of course, is contingent upon a positive response from the authors.

Thank you for your interest in this article and in the JOURNAL.

EUGENE L. NIXON
MANAGING EDITOR



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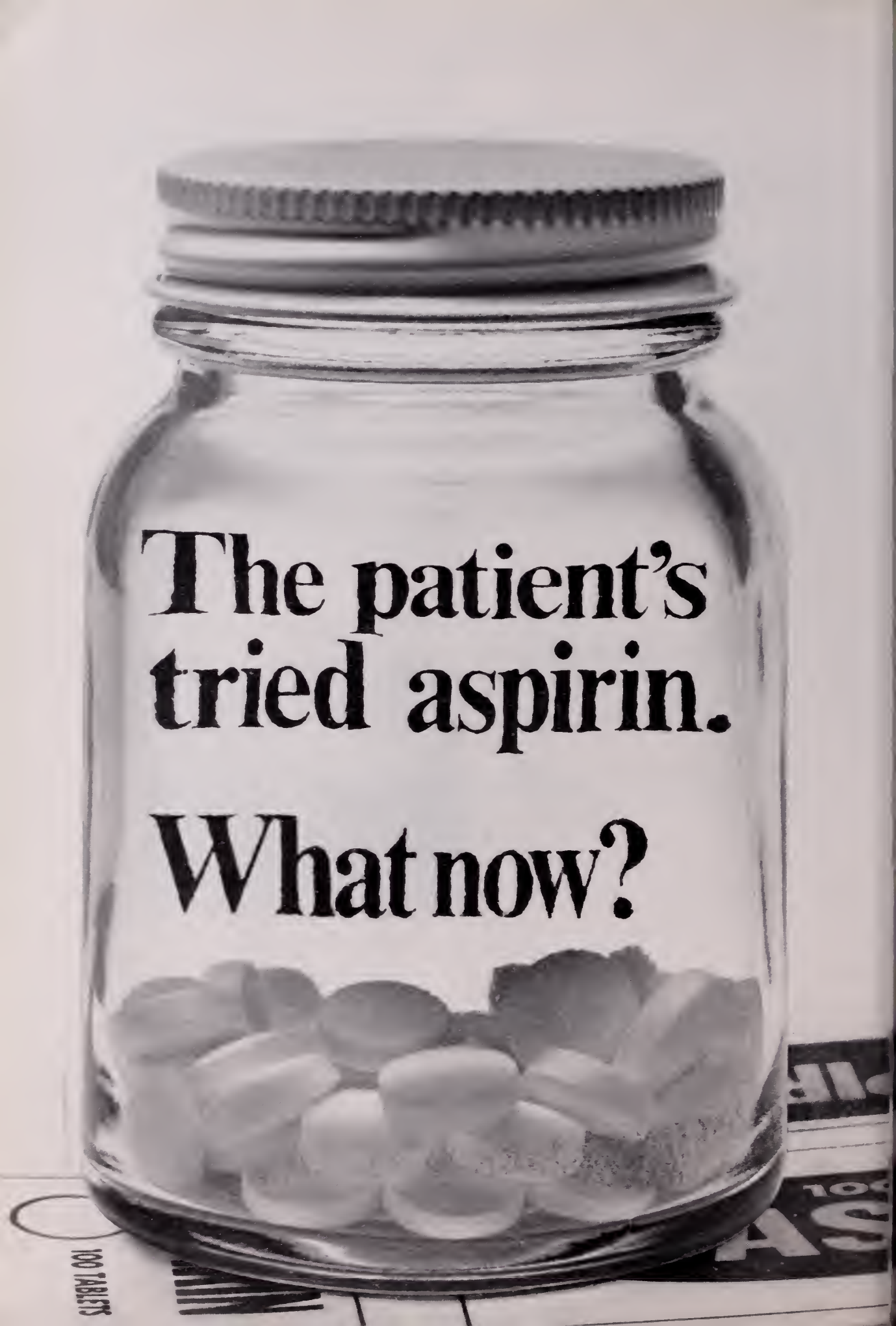
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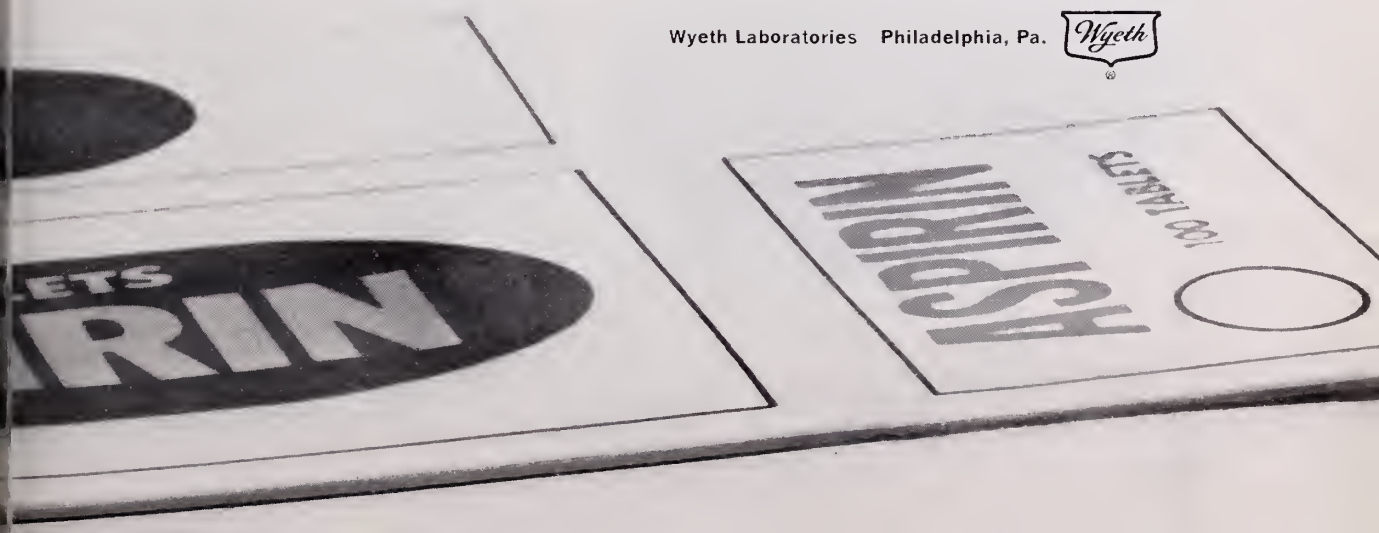
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Overdosage: See precautions section for management of overdosage.

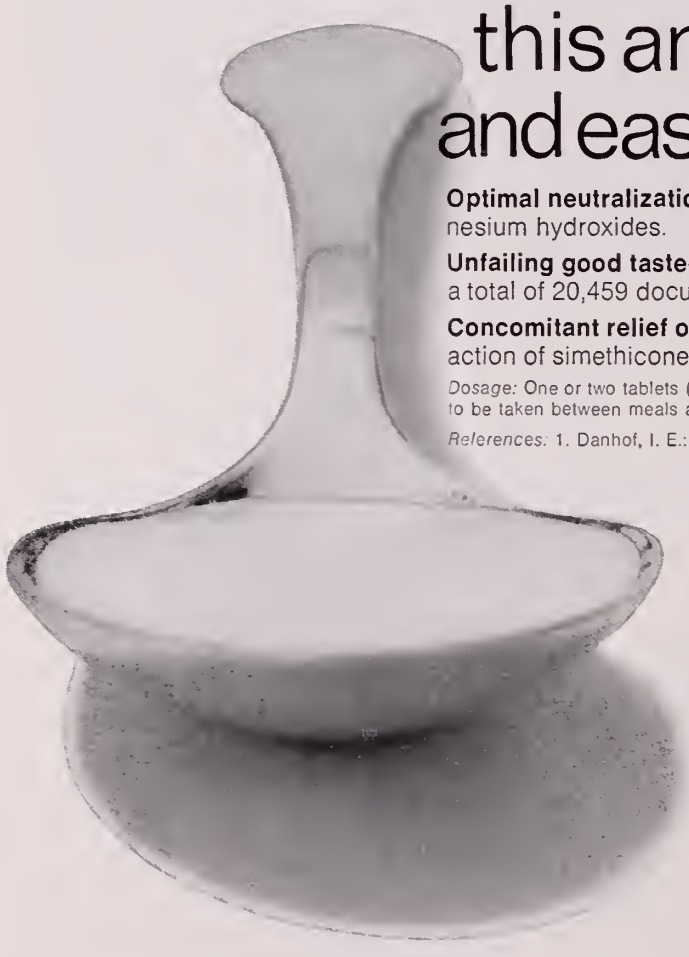
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References: 1. Danhof, I. E.: Report on file. 2. Hoon, J. R.: Arch. Surg. *93*:467 (Sept.) 1966.

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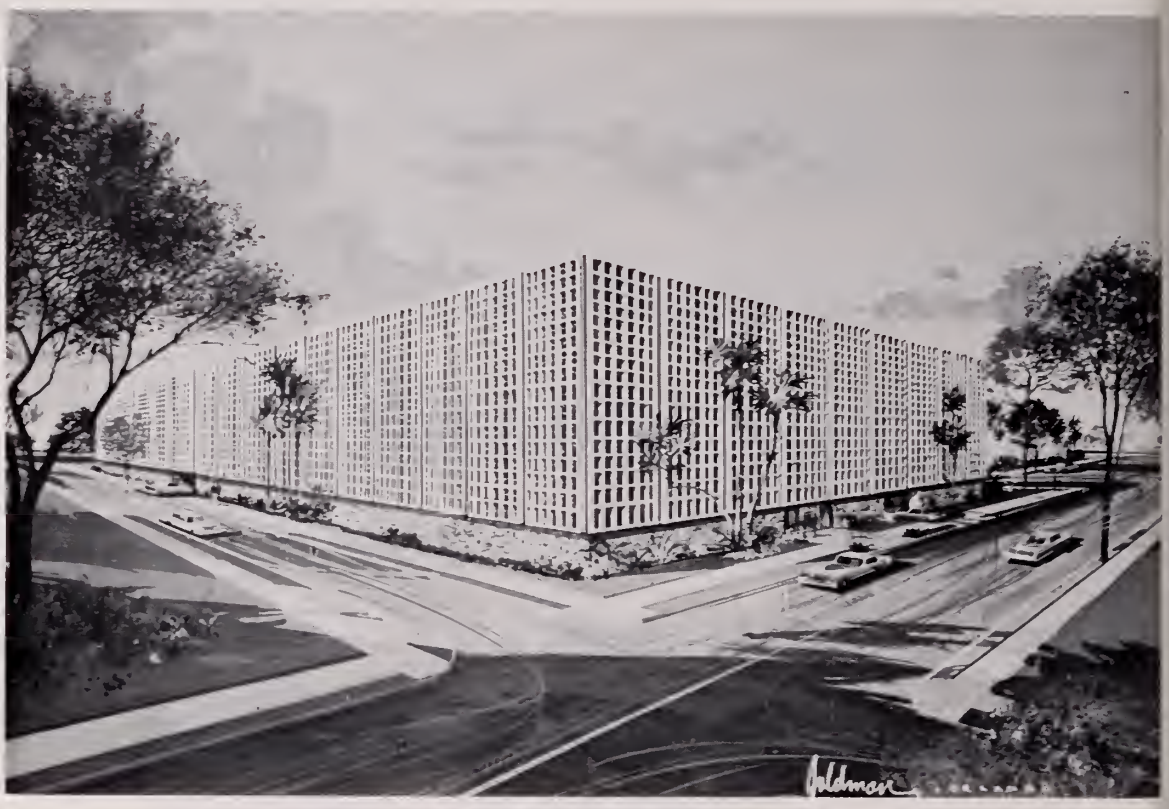


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INTERNIST WANTED: For association with four internists. Southeast coast of Florida. Board qualified, Florida boards not necessary. Salary $24,000 plus a percentage. Early partnership assured. Write C-920, P.O. Box 2411, Jacksonville, Fla. 32203.

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CARDIOLOGIST WANTED: Board certified or eligible in internal medicine for association and later partnership to join practicing cardiologist in Miami Beach, Fla. Write C-914, P. O. Box 2411, Jacksonville, Fla. 32203.

INTERNIST WANTED: Board eligible or certified, married, military obligation completed to join growing, busy internal medical practice. Cardiology subspecialty preferred. Suburban Miami area. Write C-921, P. O. Box 2411, Jacksonville, Fla. 32203.

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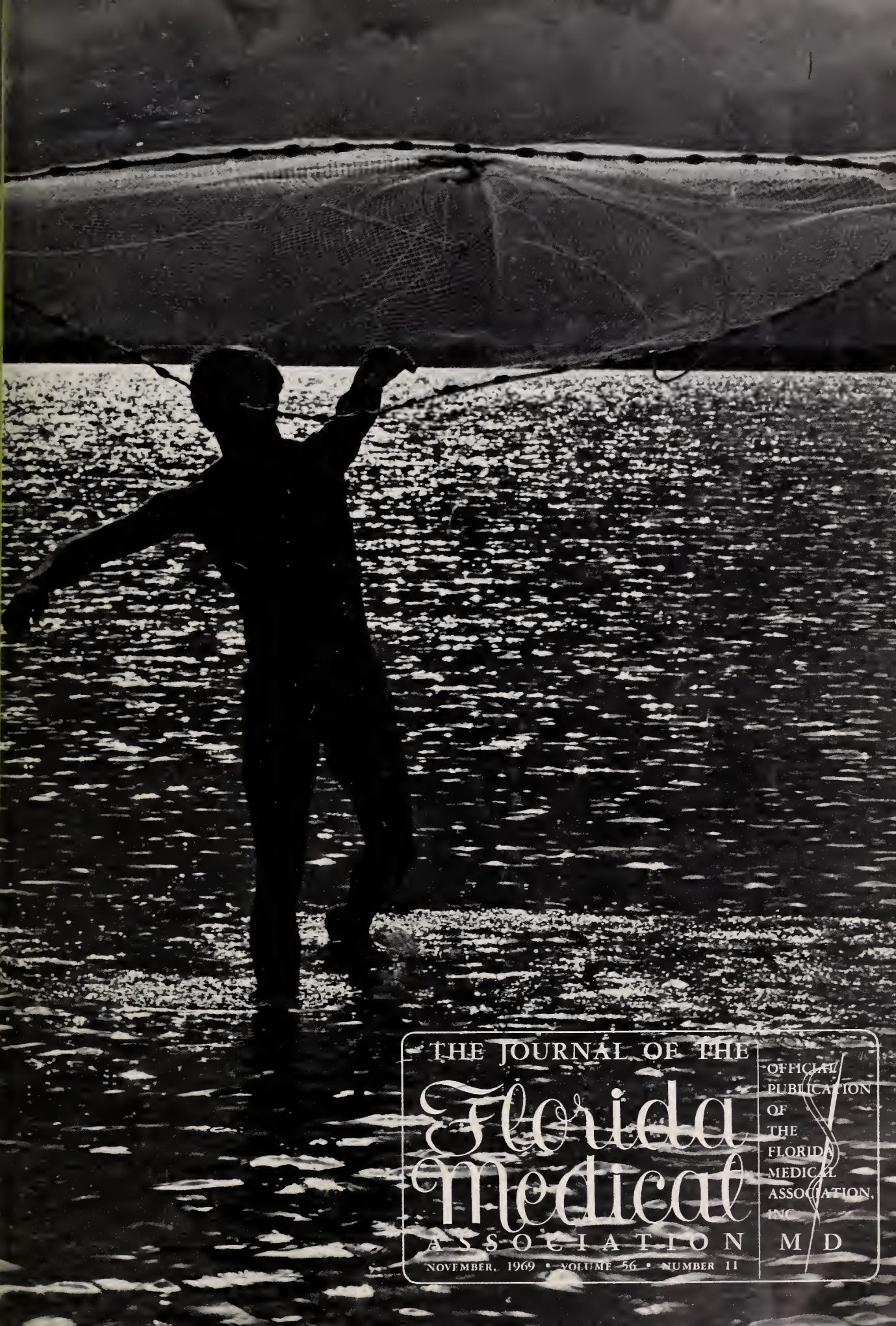
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcitec states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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NOVEMBER, 1969 • VOLUME 56 • NUMBER 11



Dear Doctor, You made me what I am today— a whole lot slimmer!

TEPANIL—the right start in support of weight-control program *you* recommend reduces the appetite. Doesn't kill it. Wei loss is significant—gradual—yet there relatively low incidence of CNS stimu tion. Because TEPANIL works on appetite, not on the "nerves."

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Allergic phenomena reported include such conditions as rash, urticaria, ecchymosis, and eryth Gastrointestinal effects such as diarrhea, constipation, nausea, vomiting, and abdominal di fart have been reported.

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(diethylpropion hydrochloride)

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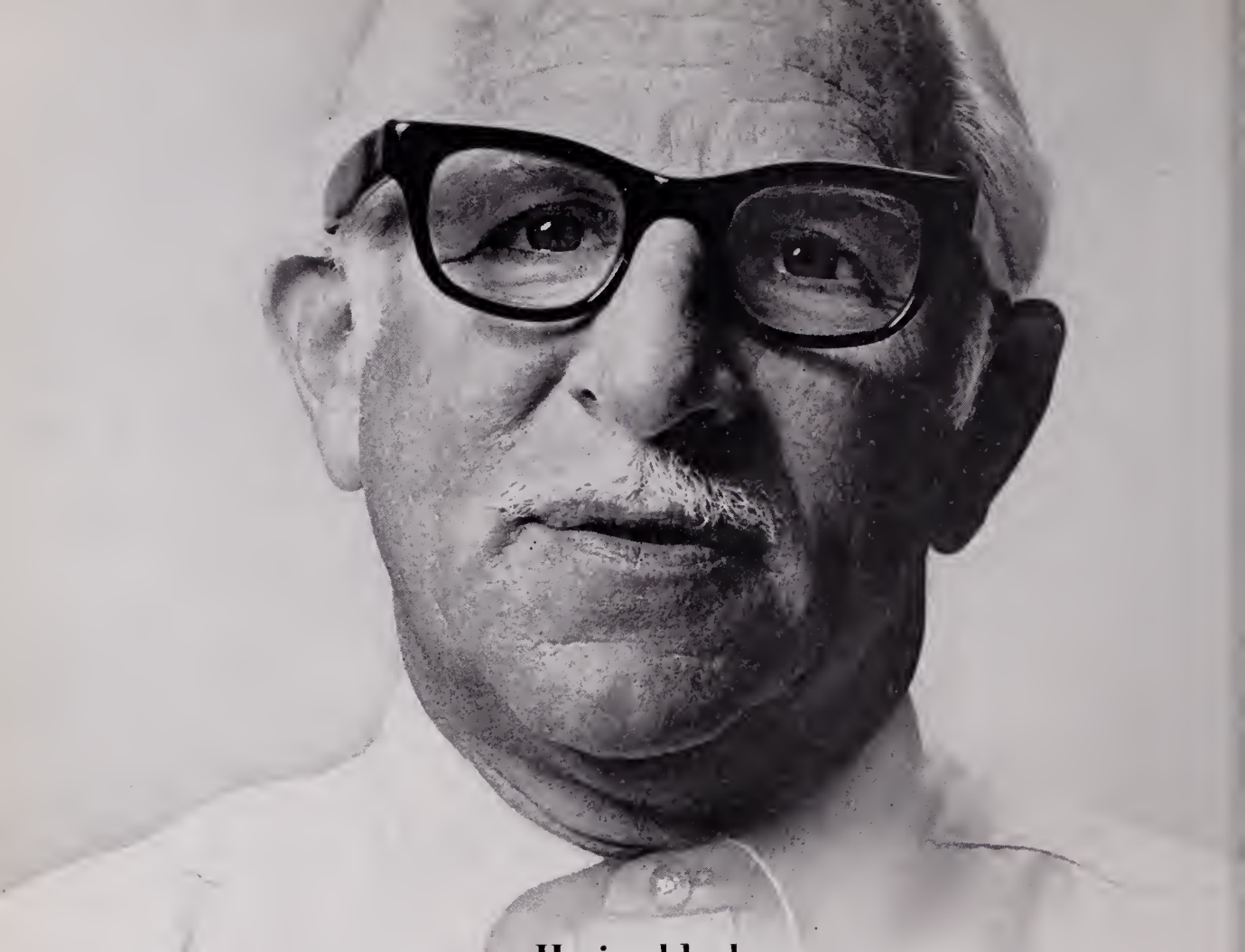
Literature on indications and dosage available on request.

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eferences:
1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., 8:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. 5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, . J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., nes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: ral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.



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Warning: In renal impairment, usual doses may lead to excessive accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated, and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort. Necessary subsequent courses of treatment with tetracyclines should be carefully observed.

Precautions: Overgrowth of nonsusceptible organisms may occur. stant observation is essential. If new infections appear, appropr measures should be taken. In infants, increased intracranial pres with bulging fontanels has been observed. All signs and symptoms disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—maculo ular and erythematous rashes; a rare case of exfoliative dermatitis been reported. Photosensitivity; onycholysis and discoloration of nails (rare). Kidney—rise in BUN, apparently dose related. Trans increase in urinary output, sometimes accompanied by thirst (ra Hypersensitivity reactions—urticaria, angioneurotic edema, anaphyla Teeth—dental staining (yellow-brown) in children of mothers given drug during the latter half of pregnancy, and in children given the during the neonatal period, infancy and early childhood. Enamel h plasia has been seen in a few children. If adverse reaction or idio crasy occurs, discontinue medication and institute appropriate ther Demethylchlortetracycline may form a stable calcium complex in bone-forming tissue with no serious harmful effects reported thus in humans.

Average Adult Daily Dosage: 150 mg q.i.d. or 300 mg b.i.d. Should given 1 hour before or 2 hours after meals, since absorption is impai by the concomitant administration of high calcium content drugs, fo and some dairy products. Treatment of streptococcal infections sho continue for 10 days, even though symptoms have subsided.

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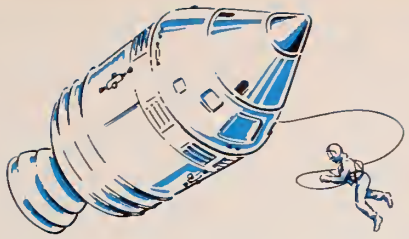


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For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

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It may be tetracycline

but it's not ACHROMYCIN® V
Tetracycline HCl

unless it bears this signature.



250 mg. and 100 mg. capsules

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Precautions: Nonsusceptible organisms may overgrow; treat superinfection appropriately. Tetracycline may form a stable calcium complex in bone-forming tissue and may cause dental staining during tooth development (last half of pregnancy, neonatal period, infancy, early childhood).

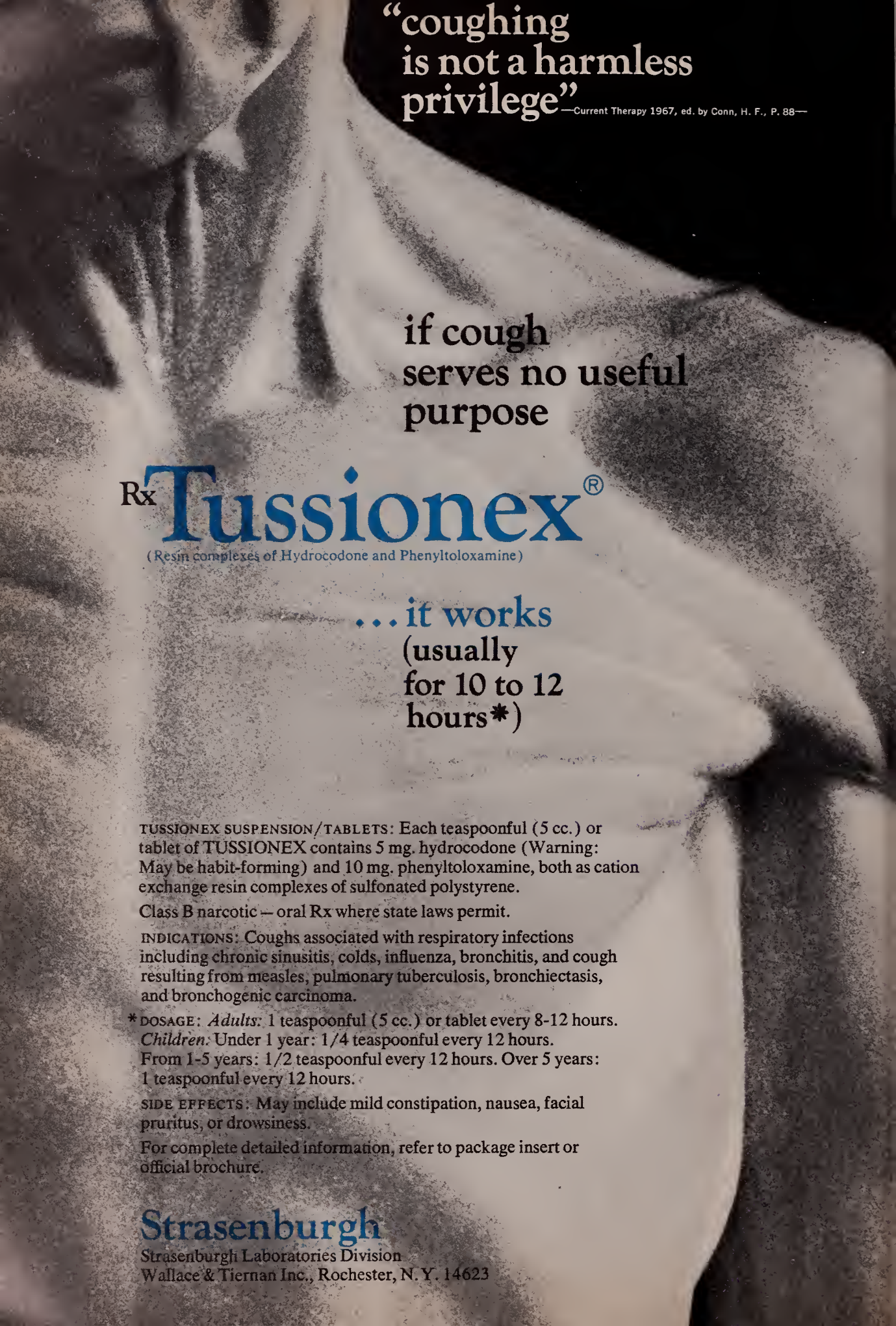
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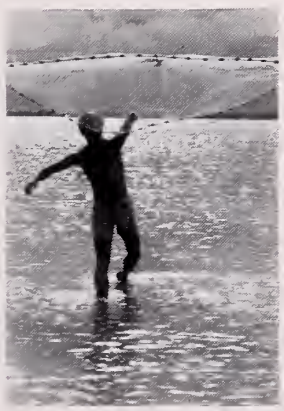
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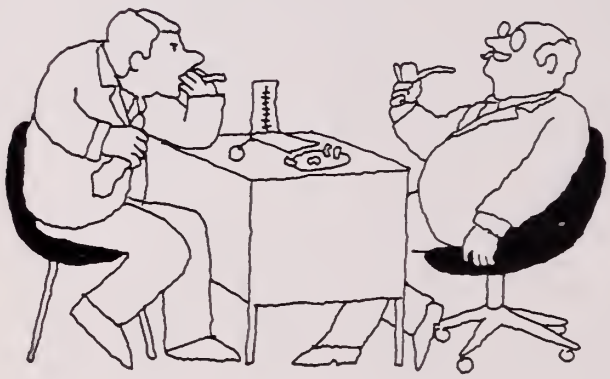


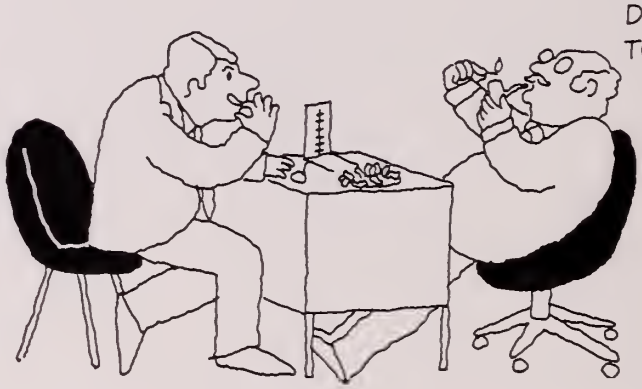
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Picture by David Winter of Coral Gables, now a student at the University of Manchester, Manchester, England. —Ed.

The Apprehensive Hypertensive



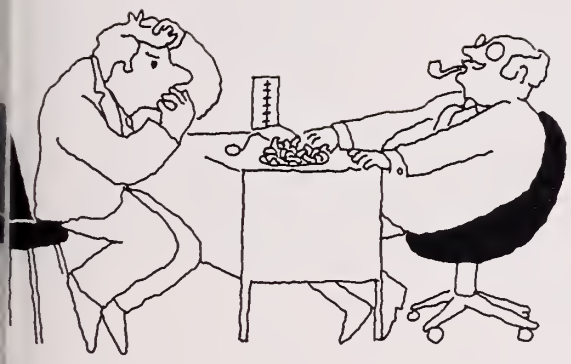


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Speak Up

As this is being written the Board of Governors of the Florida Medical Association has just completed its fall meeting. Here in Nassau about 50 of our key doctors have studied and discussed in depth many matters affecting all of us. What we recommend to our membership will be the result of long and careful study by our committees, councils and Board of Governors.

Our worry now is how to get our discussions and recommendations to you. We want you to know as nearly as possible everything we know but without the necessity of what we have been through in the past few days—namely, of being "penned up" and suffering through long sessions.

Several methods are at our disposal: (1) We can wait until May for our reference committee discussions at our House of Delegates; (2) Our council and committee chairmen can communicate with you through the county society channels; (3) Our "Briefs" can summarize our actions; (4) We can use the JOURNAL of the FMA which we hope is read by each of you. All of these methods will be used. No single one of them is adequate.

How then to get information to you? The JOURNAL of FMA can be the best medium if used well. Dr. Franz Stewart, Mr. Gene Nixon and Mrs. Louise Rader and the rest of the staff are working hard to improve the JOURNAL. Nothing in our JOURNAL is accidental or slipshod. Many subtleties are present on our covers and in the editorials if you will look for them. Our scientific papers are good. An organizational section is being developed by Dr. Richard Fleming, an assistant editor, who is also on the Board of Governors. We want a viable question and answer and letter section where your specific questions and opinions can be printed. You must write; we cannot make you do this but we welcome it. Our editorial staff can help you but you must have the desire first. Why can't we get some idea of controversial subjects before we face them at our annual convention and must make decisions there on short notice?

You private practitioners, especially those who rarely speak up publicly, you have opinions—valuable ones. Let us hear from you.

You public health physicians, medical school people (especially in the lower echelons), government-connected physicians and allied professions—all of you surely have valuable contributions aside from purely scientific work.

Council chairmen, committee chairmen, county society officers—give us your ideas as well as your formal reports.

The JOURNAL staff is anxious to be of real service to the FMA concerning our communications with each other. We will print anything of interest, subject, of course, to limitations of space, good taste and the judgment of the Editor. We may need to beef up our staff.

The Editor of our JOURNAL, Dr. Franz Stewart, is intensely interested in making our JOURNAL more useful. He is interested in ideas which mirror the writer as well as present the subject. Any contribution he is unable to print will be acknowledged promptly, something which is difficult.

Speak up! Each of our members from the Board of Governors to the newest graduate should use the medium of the JOURNAL to communicate. You won't be asked directly to write in because responses should be spontaneous but I am asking you now to use our JOURNAL for exchange of ideas.

Speak up!

Henry J. Baberough Jr.

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The pain of earache was allegedly relieved by holding a hot roasted onion to the ear.

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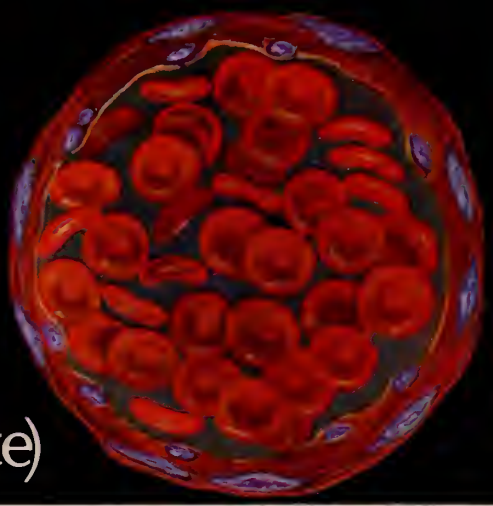
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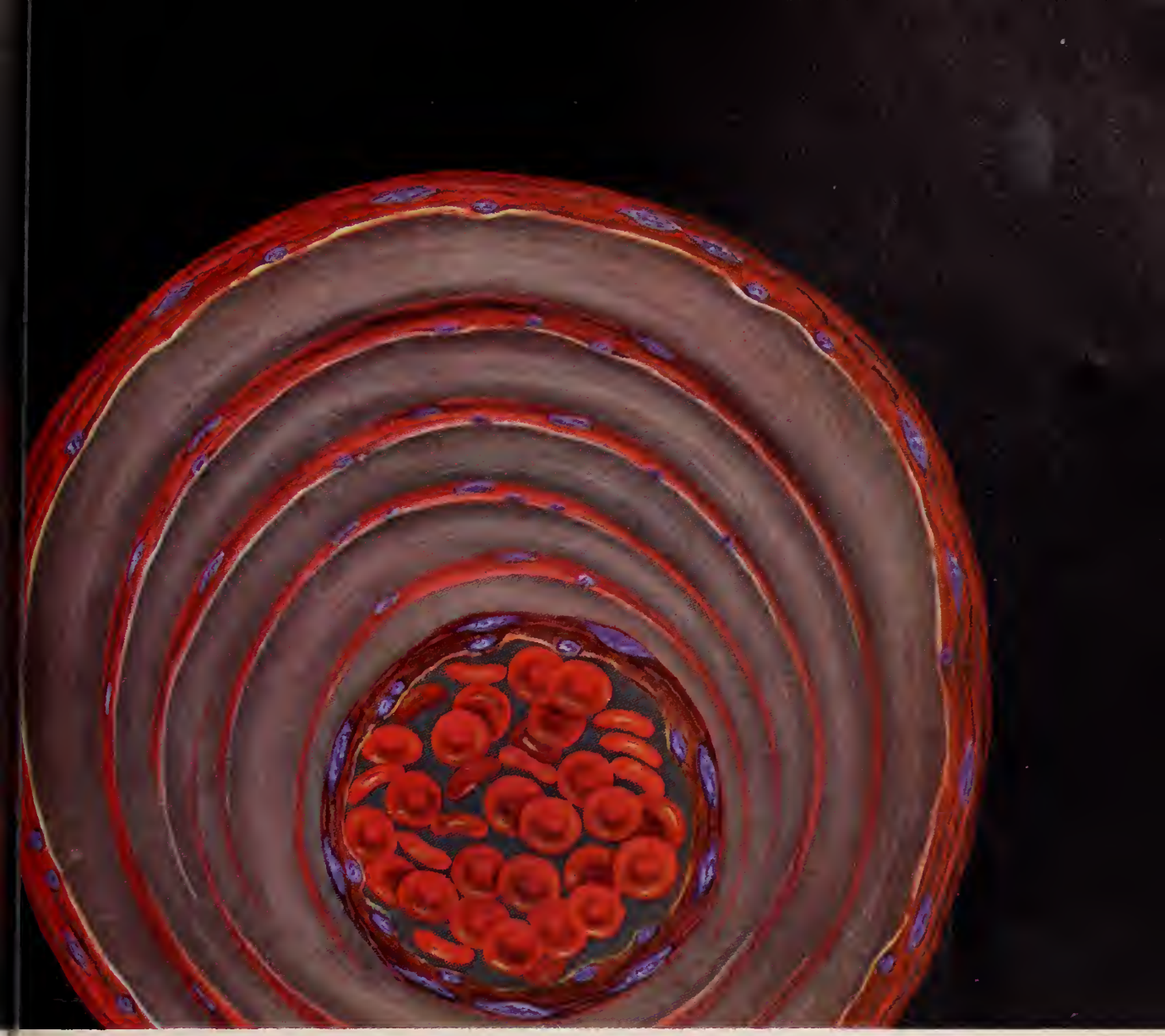
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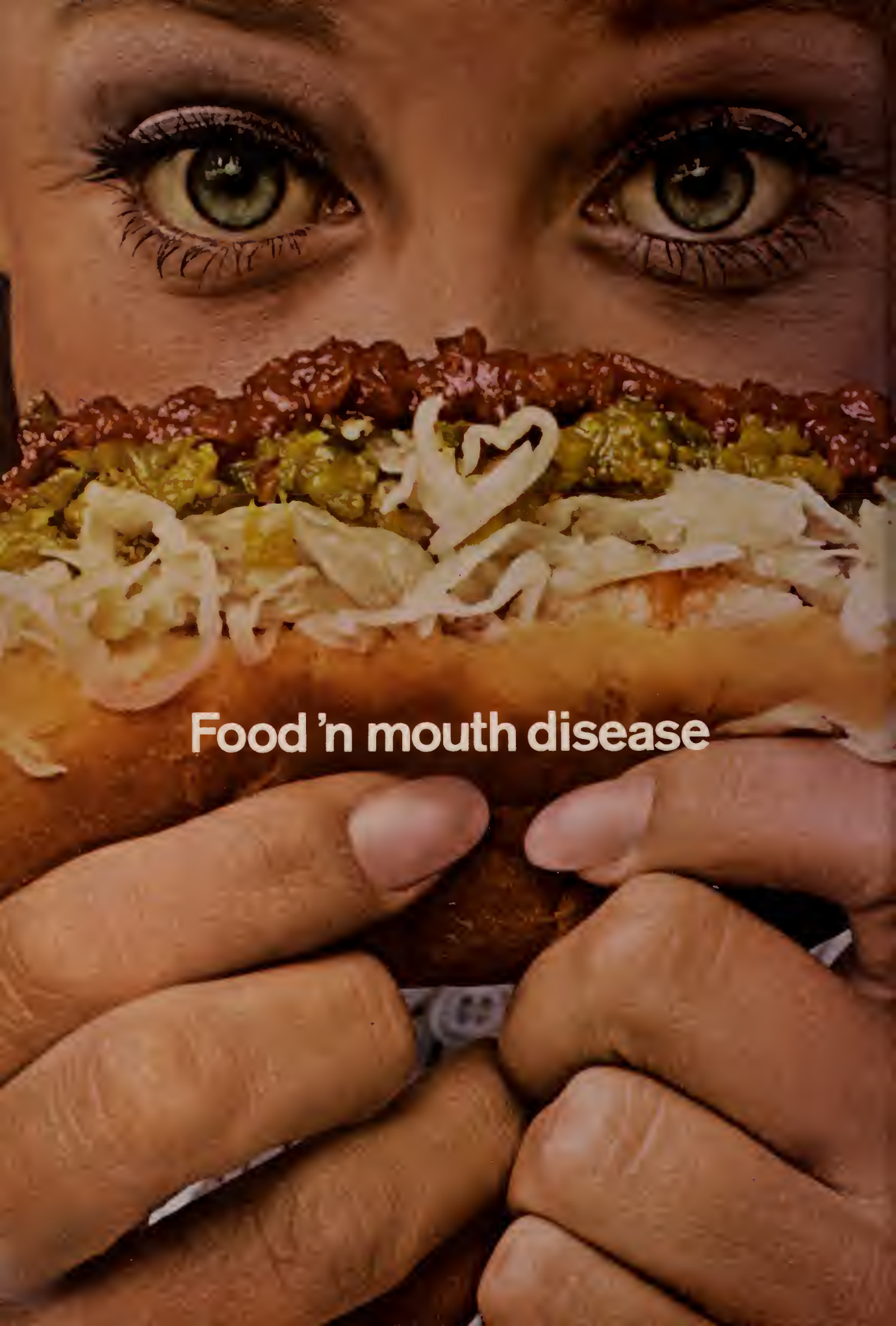
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g: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks. There have been clinical reports of congenital malformation, but causal relationship has not been proved. Animal teratogenic studies have been inconclusive.

Precautions: Use with caution in moderate hypertension and cardiac decompensation. Cases involving abuse of or dependence on phenmetrazine hydrochloride have been reported. In general, these cases were characterized by excessive consumption of the drug for its central stimulant effect, and have resulted in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations or delusions. Do not exceed recommended dosage.

Adverse Reactions: Dryness or unpleasant taste in the mouth, urticaria, overstimulation, insomnia, urinary frequency or nocturia, dizziness, nausea, or headache.

Dosage: One 25 mg. tablet b.i.d. or t.i.d. Or one 75 mg. Endurets tablet a day, taken by midmorning.

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Preludin may be used to curb appetite in obesity associated with such conditions.

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Dosage: One 350 mg. capsule, 3 times daily and two at edtime is suggested as the adult starting dose. Adjust to uit individual requirements. Daily doses above 3000 mg. re not recommended.

Contraindications: Known hypersensitivity to tybamate. ince no studies have been done with this drug in human regnancy, it should not be used in pregnancy unless the otential benefit outweighs the risk.

Warnings: Administer cautiously to patients receiving henothiazines or other CNS depressants or having his-ory of convulsive seizures (See Adverse Reactions). Con-ider possibility of additive actions with alcohol or other sychotropic agents, particularly phenothiazines or MAO nhibitors.

Precautions: Avoid abrupt withdrawal after prolonged use, although withdrawal symptoms have not been reported to date. Exercise caution in addiction-prone individuals. If symptoms of hypersensitivity occur, discontinue at once and initiate appropriate symptomatic treatment. Avoid activities requiring optimal mental alertness if drowsiness or vertigo are present. As with any new drug, use cautiously in patients with history of drug allergies, blood dyscrasias, and hepatic or renal disease; periodic measurements of hepatic, hematopoietic and renal function should accom-pany prolonged and/or high doses.

Adverse Reactions: Most frequent reactions, rarely re-quiring discontinuation of tybamate, include drowsiness, dizziness, nausea, insomnia, and euphoria. There have been a few reports of skin rash, urticaria, and pruritus. Rare side effects include hyperactivity, fidgetiness, flushing, and tach-ycardia, suggesting excessive stimulation; also ataxia, un-steadiness, confusion, feeling of unreality, "panic reaction," fatigue, headache, paresthesias, vertigo, gastrointestinal disturbances, glossitis, and dry mouth. Grand mal or petit mal seizures have been reported in a few hospitalized psy-chotic patients receiving tybamate (up to 6000 mg. daily) together with phenothiazines and other psychotropic agents, but not with tybamate alone. Consider the possibil-ity of rare, serious adverse reactions such as may occur with the related drug, meprobamate. If excessive amounts are ingested, gastric lavage and symptomatic therapy, in-cluding central stimulants as necessary, are recommended. Before prescribing, consult package circular.

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Applications are now being taken for presentation of scientific and educational exhibits at the 1970 Annual Meeting of the Florida Medical Association being held May 6-10 at the Diplomat Hotel, Hollywood-by-the-Sea. The deadline for all applications is December 1, 1969. For the convenience of JOURNAL readers wishing to apply, a form which may be utilized for this purpose may be found on page 882 of this issue. Completed forms should be mailed to Gerold L. Schiebler, M.D., Chairman, Committee on Scientific Assemblies, P. O. Box 2411, Jacksonville, Florida 32203.


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The Bedside Evaluation of Common Systolic Murmurs

Brief Review of Current Concepts

Michael S. Gordon, M.D., Ph.D.

This discussion is limited to the types of systolic murmurs most frequently seen in clinical practice, emphasizing (1) certain aspects of differential diagnosis, (2) current concepts of pathogenesis, and (3) new thoughts with regard to therapy. We are essentially discussing mitral insufficiency and aortic stenosis, although certainly other systolic murmurs are occasionally encountered. In fact, in the younger patients an innocent pulmonary ejection murmur at the upper left sternal edge is the most frequently heard.

Differential Diagnosis

Systolic murmurs have been divided into ejection and holosystolic types.[1] Figure 1a shows the typical ejection murmur. By examination of the left ventricular and aortic pressure contour, the characteristics of the ejection murmur are readily understood. In contrast, Figure 1b shows the classic systolic regurgitant murmur. Reference to the pressure contour explains the reason for the murmur beginning at the first sound and sometimes going through the aortic second sound.

The basic differentiation between ejection and holosystolic murmurs is valid. However, there are important exceptions; some have been recently recognized. To enumerate a few: 1. Aortic stenosis is not infrequently heard very well at the apex and occasionally heard best at the apex. 2. Mitral insufficiency, especially that due to abnormalities of the posterior leaflet, may be heard best at the base and radiate into the neck, due to the anteriorly directed jet of blood.[2] 3. Sounds considered to be extracardiac in the past, such as honks and clicks, have been shown in most cases to be due to mitral valve disease and, more specifically, disease of the paravalvular apparatus, i.e., the chordae and papillary muscles.[3,4]

How then can one be certain from which valve the murmur is generated? There are two methods: First, the company the murmur keeps on physical examination, especially (a) the carotid pulse and (b) the chest wall evaluation, and second, certain interventions which may be used to selectively increase or decrease the murmur.

The Carotid Vessel: Let us start with evaluation of the company the murmur keeps and look first at the carotid vessel. The normal carotid pulse contour is divided into three simple areas, upstroke, peak, and downstroke, ending with the incisura (Fig. 2a).

The patient with significant aortic stenosis has a slow rising pulse, often with a shudder superimposed (Fig. 2b).[5] If significant aortic insufficiency is associated with aortic stenosis, the arterial pulse will rise rapidly, have two systolic peaks, and fall off rapidly during diastole, the so-called bisferiens pulse (Fig. 2c).[6] Figure 2d shows the pulse contour of a patient with idiopathic hypertrophic subaortic stenosis, with which mitral insufficiency may be associated. In this disease, due to a dynamic muscular outflow tract obstruction, a

Dr. Gordon is assistant professor, Department of Medicine, University of Miami School of Medicine, Miami.

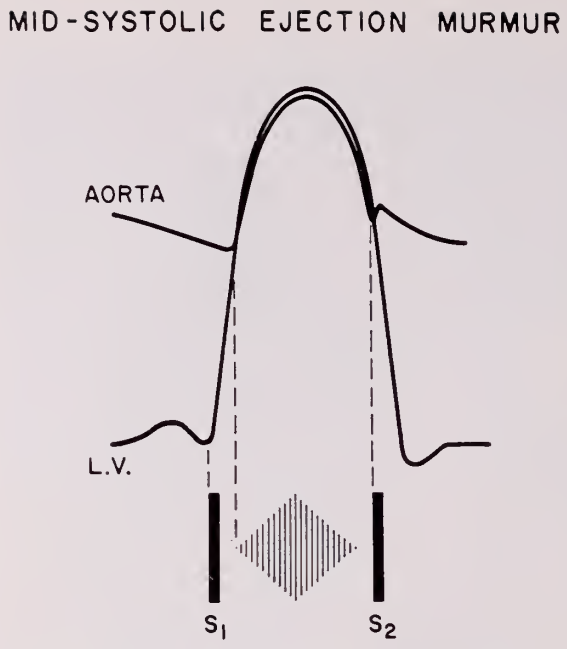


Fig. 1a.—"Classic" systolic murmurs. Mid-systolic ejection murmurs occur during the period of ventricular ejection. As a result, the onset of the murmur is separated from the first sound by the period of isometric contraction, and the murmur, which is crescendo-decrescendo in nature, stops before the respective semilunar valve closure.

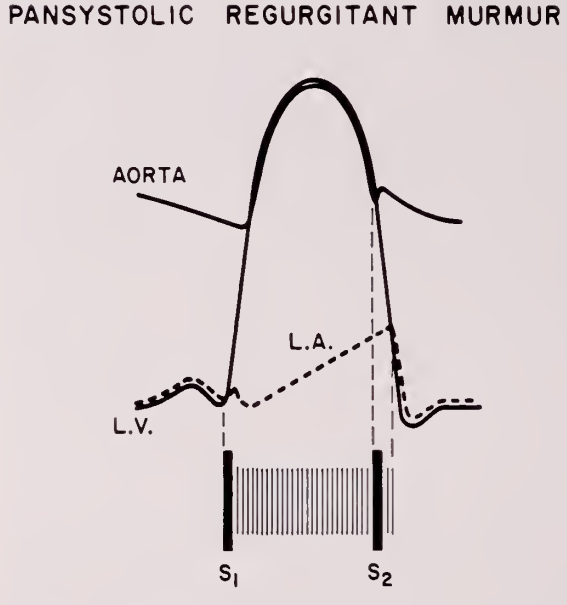


Fig. 1b.—The pansystolic regurgitant murmur of mitral insufficiency begins with, and may replace, the first heart sound. This murmur continues up to and through the aortic closure sound, since at that time ventricular pressure continues to exceed left atrial pressure.

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virtually diagnostic pulse contour, characterized by a rapid upstroke and two systolic peaks in the absence of an accentuated downstroke, is frequently observed.[7] Figure 2e shows the carotid pulse of a patient with mitral insufficiency, characterized by a rather rapid upstroke. This feature correlates with the more rapid than normal ejection from the ventricle in mitral insufficiency, wherein blood flows in two directions during systole.[8]

The Chest Wall: By palpating a thrill more pronounced at the base or apex, one obtains the tactile equivalent of inching over the chest wall with the stethoscope to decide where the murmur is loudest. If the thrill is loudest at the base and radiates into the neck, one generally, but not always, can assume that the murmur is due to aortic stenosis. If the thrill is maximal at the apex, it is more likely due to mitral insufficiency.

The apexcardiogram is a clinically useful reflection of precordial movement. Its major practical value, as is true of phonocardiography in general, is in the timing of hemodynamic events. It is of inestimable value in the teaching of bedside cardiology. The normal left ventricular apexcardiogram is shown in Figure 3a.[9]

An interesting chest wall movement which occurs in patients with mitral insufficiency is the left atrial rock. In this condition the left sternal border rises much as it would with right ventricular hypertrophy. More careful timing during palpation reveals that the left ventricular thrust at the apex, which begins with isometric contraction, precedes the lift of the right ventricle. Hence, a rocking motion is imparted to the chest wall and to the palpating hand. With acute expansion of the compliant left atrium, it is possible for the atrium to throw the right ventricle forward and give "pseudo right ventricular hypertrophy."[10] I have also seen patients with organic tricuspid insufficiency wherein a right atrial rock may be palpated at the right sternal border following a right ventricular lift at the left sternal border.

Another nearly diagnostic chest wall finding occurs in idiopathic hypertrophic subaortic stenosis in which two systolic apical impulses may be felt.[11] Left bundle branch block may mimic this.[12] In idiopathic hypertrophic subaortic stenosis, gallop sounds are frequently palpable, and it is possible to palpate presystolic and mid-diastolic expansion at the apex; hence, three and even four apical impulses are felt at the apex (Fig. 3b).

Another chest wall movement which may suggest a murmur due to mitral insufficiency is that occurring in what has been called the ectopic area,

located between the usual left and right ventricular areas of the chest wall, and due to an aneurysm of the left ventricle.[13] Due to the frequent association of papillary muscle dysfunction with ventricular aneurysms, mitral insufficiency is a frequent concomitant finding; and in the presence of a left ventricular aneurysm an associated systolic murmur may be due to mitral insufficiency.

Finally, there are those who have developed some expertise in evaluating the difference between a diastolic (volume) and a systolic (pressure) overloaded ventricle. A stronger, more sustained apical impulse occupying a somewhat larger area than normal, but not very dynamic, is consistent with aortic stenosis. A left ventricular impulse which is dynamic, widely palpable and displaced downward and to the left should be considered more consistent with mitral insufficiency.

Physiologic Interventions: The second method for discovering the valve from which a murmur emanates is to determine the effect of certain interventions on the murmur. These include (1) ventricular premature contractions, and (2) amyl nitrite. The ventricular premature contraction is the most practical. Here one pays particularly close attention to the beat following the extrasystole. Due to the longer diastolic filling period, which follows the ventricular premature contraction, the aortic root pressure falls below its normal level. For this reason, the resistance to the egress of blood across the aortic valve during the next systole is reduced; hence, flow is enhanced across the aortic valve, and relatively decreased across the mitral valve. Therefore, if one listens to the loudness of the murmur during the beat following a ventricular premature contraction, the murmur of aortic stenosis will frequently be louder, while the murmur of mitral insufficiency will be softer or unchanged (Fig. 2b).

Extending these physiologic principles to pharmacologic interventions, administration of amyl nitrite, by reducing aortic root pressure will have a similar effect on systolic murmurs, i.e., the murmur of aortic stenosis will get louder and that of mitral insufficiency softer.[14]

Pathogenesis

In the last few years, certain observations of Dr. George Burch have stimulated active reassessment of mitral valve function and the structures around it.[15] The murmur of papillary muscle dysfunction in its classic form is shown in Figure 4a. It occurs after the first sound, has an ejection quality and is associated with electrocardiographic

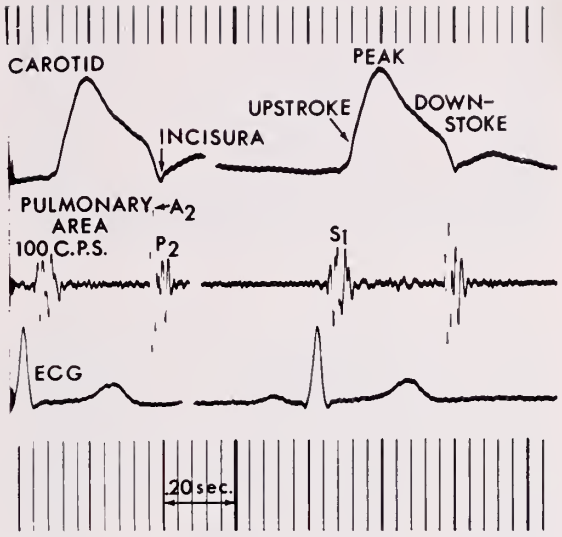


Fig. 2a.—The carotid pulse. Normal carotid tracing.

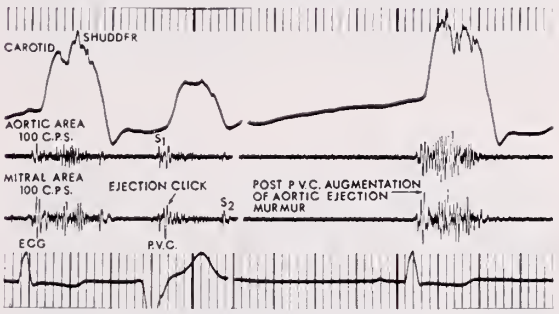


Fig. 2b.—Carotid tracing in moderate aortic stenosis. During the beat following an extrasystole, the murmur is louder due to enhanced flow across the aortic valve. This is the result of the fall in aortic root pressure which occurs in the long post extrasystole diastolic filling period. The reverse obtains during the extrasystolic beat, resulting in a diminution of the murmur.

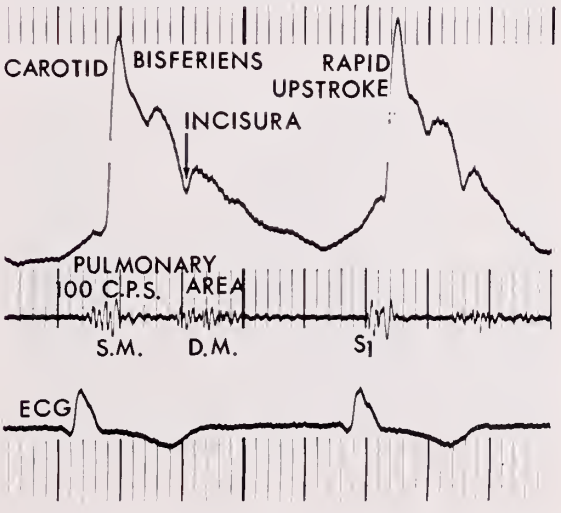


Fig. 2c.—Carotid tracing in aortic insufficiency with mild aortic stenosis. Note the rapid rise and double systolic impulse. The short early systolic murmur indicates the mild nature of the aortic stenosis. In fact, pure aortic insufficiency is frequently associated with a short early systolic "flow" murmur.

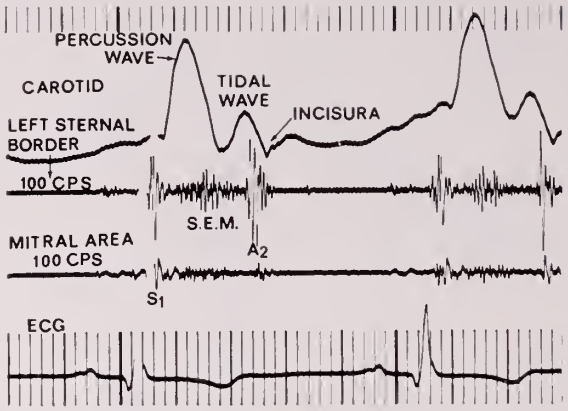


Fig. 2d.—Carotid tracing in idiopathic hypertrophic subaortic stenosis. Note the bifid pulse with percussion and tidal waves, and the ejection quality systolic murmur maximum at the left sternal border though well heard at the apex.

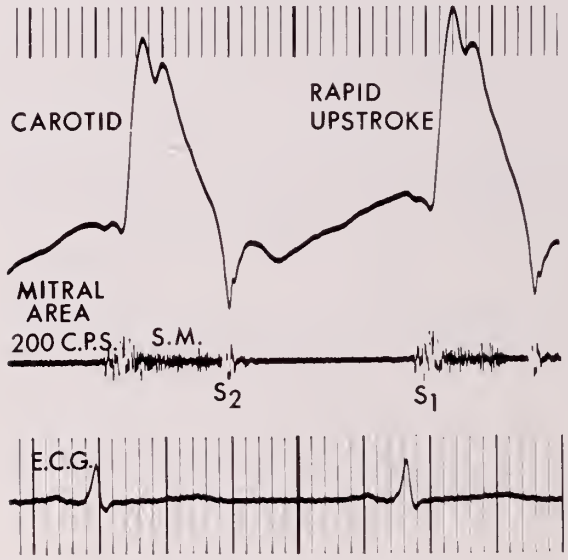


Fig. 2e.—Carotid tracing in mitral insufficiency. Note the rapid upstroke which is correlated with rapid left ventricular ejection in this disease.

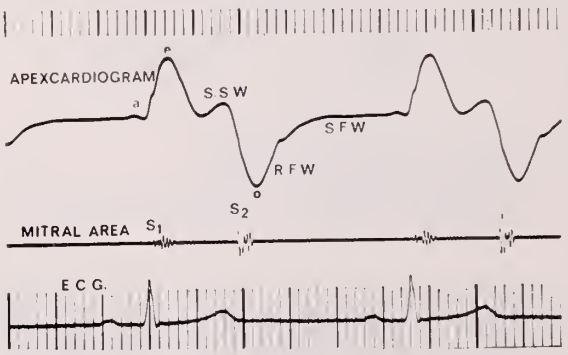


Fig. 3a.—The apexcardiogram. Normal apexcardiogram. The major significant components are the "a" wave reflecting atrial contraction, the "e" point reflecting aortic opening, the second systolic wave (S.S.W.) which is normally not prominent, the "o" point reflecting mitral opening, the rapid filling wave (R.F.W.) which peaks at the time of the third heart sound, and finally the slow filling wave (S.F.W.)

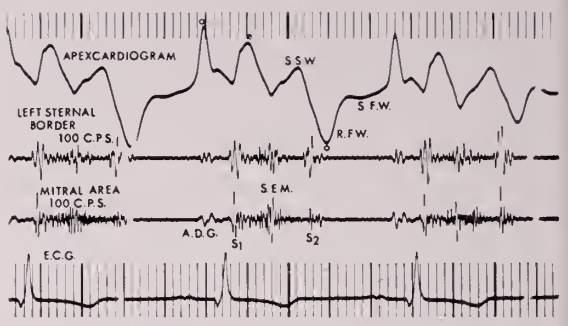


Fig. 3b.—The classic apexcardiogram and acoustic events of idiopathic hypertrophic subaortic stenosis. Note the triple apical impulse with prominent "a" wave and two systolic waves. The second systolic wave often occurs at the peak of the murmur, but may be slightly delayed.

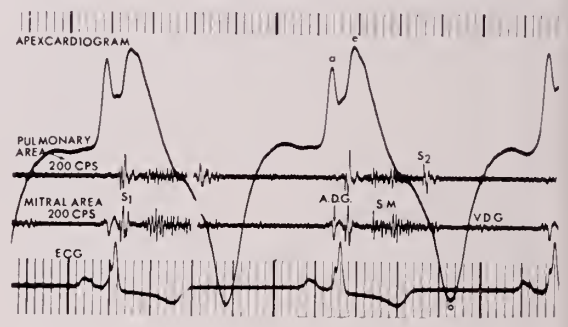


Fig. 4a.—The syndrome of papillary muscle dysfunction. Apex and phonocardiogram. Note the prominent "a" wave associated with an atrial gallop sound and the ejection quality apical mitral systolic murmur.

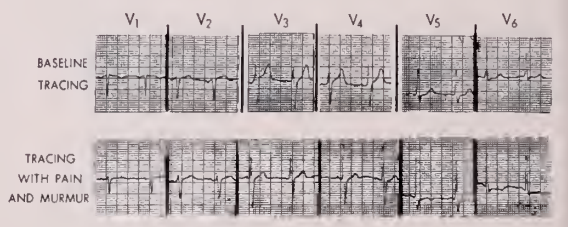


Fig. 4b.—Evidence of anterolateral wall ischemia is the electrocardiographic counterpact of the murmur of papillary muscle dysfunction. The upper tracing shows the baseline configuration. The lower tracing shows ST-T wave changes (leads V4, V5, and V6) which occurred three hours later during a bout of chest pain and at the same time as the murmur shown in Figure 5a.

findings of anterolateral wall ischemia (Fig. 4b). This was described as an electrocardiographic-clinical syndrome wherein ischemia of the anterolateral papillary muscle was associated with its dysfunction and hence mitral regurgitation during systole. The remaining illustrations in Figure 4 represent variations on the theme of papillary dysfunction. Figure 4c shows normal isometric and isotonic contraction, and demonstrates that the papillary muscles hold the mitral valve closed during both periods of systole. Figure 4d shows what might well occur in patients who have a classic papillary muscle dysfunction murmur with ischemia but no scarring of the papillary muscles. During isometric contraction the papillary muscle is capable of holding the valve closed, and the first sound occurs normally. During isotonic contraction, however, the papillary muscle does not contract with the rest of the ventricle and regurgitation occurs, accounting for the late onset of the murmur as well as its ejection characteristics. Figure 4e shows what may occur in patients who have actual papillary muscle scarring. The murmur may be holosystolic here, since the scarred papillary muscle cannot hold the valve closed during isometric contraction, and hence the murmur may begin before ejection and continue throughout systole. In Figure 4f the effect of a ventricular aneurysm on papillary muscle function is shown.

It should be stressed that ventricular aneurysms need not be anatomic but may be physiologic, and we are coming to understand that ventricular "dysynergy" is an important factor in ventricular contractility and hence cardiac output.[16] One may have a physiologic ventricular aneurysm much as one has papillary ischemia without actual scarring. The result in either case is the same; during systole papillary muscles are pulled away from their normal position and do not allow the valve to close, producing a systolic murmur.

Finally, the mitral valve "renaissance" has more recently included a reassessment of systolic honks and clicks. Sophisticated hemodynamic evaluation of these events, including phonocatheter studies, has in most cases localized them to the paravalvular apparatus, both papillary muscles and chordae (Fig. 5). Clicks have occasionally been observed to give way to short systolic murmurs and these in turn to classic holosystolic mitral regurgitation.[3,4]

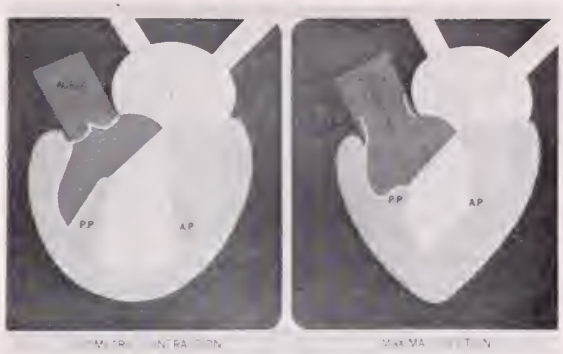


Fig. 4c.—Normal papillary muscle function.

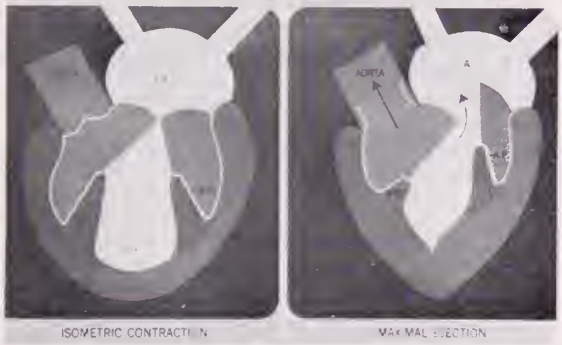


Fig. 4d.—Ischemia of a papillary muscle. Regurgitation in ejection phase; apical systolic murmur begins after first heart sound.

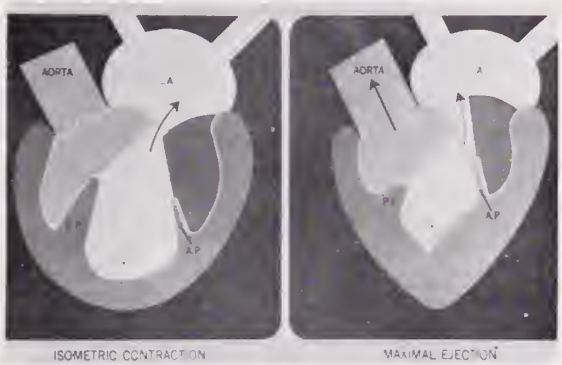


Fig. 4e.—Extensive fibrosis and atrophy of a papillary muscle. Regurgitation throughout ventricular contraction; the murmur is pansystolic.

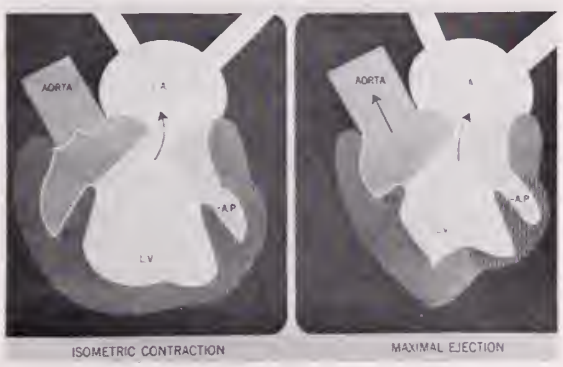


Fig. 4f.—Infarct with dilatation and free wall aneurysm. Murmur is pansystolic, but may change as leaflets approach each other—or as bulging wall pulls them further apart.

These diagrams, 4c, 4d, 4e and 4f, are adapted with permission from Burch, DePasquale, and Phillips, Arch. Int. Med. 112:112, 1963.

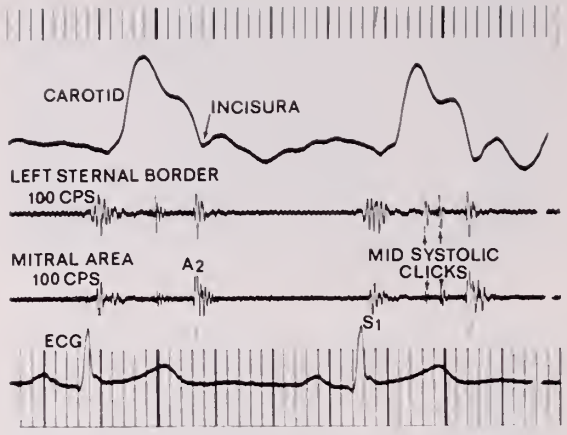


Fig. 5.—Mid-systolic clicks. In most cases these sounds emanate from the paramitral valve structures and may be clinically significant.

Therapeutic Implications

The role of corrective cardiac surgery in patients with valvular heart disease is well established. Several points should be emphasized. First, by using these bedside diagnostic methods, the precise nature of the mechanical defect and its hemodynamic sequelae can often be predicted, and it is frequently unnecessary to perform cardiac catheterization. Second, there must be a demonstrated failure of excellent medical therapy. Finally, age alone should not be considered a contraindication to surgery.

What of those murmurs which are not hemodynamically significant and would not be considered for intensive medical therapy or cardiac surgery? These are usually the short aortic ejection murmurs at the base so frequently heard in patients in the older age groups, and the murmurs and clicks heard at the apex, in the past felt to be extracardiac, which are likely due to papillary muscle and chordae dysfunction. Although somewhat speculative, it is believed that these murmurs represent enough abnormality of valve and paravalvular structures, that bacterial endocarditis may occur with greater than normal frequency. Such cases are now being reported. It is the suggestion of some experts that endocarditis prophylaxis be given during dental manipulation or other forms of surgery.[17]

A second significance of these relatively innocent bruits is in differential diagnosis. If the murmur of mitral insufficiency develops at the apex during a bout of chest pain, one may conclude with high confidence that the pain is ischemic cardiac pain and has affected the papillary muscles, causing dysfunction and regurgitation through the mitral valve. Another differential diagnostic point arises in the post infarction patient wherein the murmur of a ruptured papillary muscle or ruptured ventricular septum may be similar in quality to that of papillary muscle dysfunction.[15]

Summary

Diagnosis: Too often bedside methods in cardiovascular diagnosis are deleted and more sophisticated and hazardous procedures are performed. Knowledge of the classic teachings of holosystolic and ejection systolic murmurs is not enough for adequate evaluation. There must be an awareness of newer variations on the basic theme. The significance of these murmurs is judged by the company they keep on physical examination, especially the carotid vessel and chest wall movement, and also by certain interventions, the most convenient being the effect of ventricular premature contractions and amyl nitrite on the loudness of the murmur.

Pathogenesis: The concept of papillary muscle dysfunction has caused a renaissance in thinking about mitral valve function. It is becoming clear that clicks and murmurs believed to be insignificant or extracardiac are in fact due to paravalvular apparatus disease.

Therapy: Hemodynamically insignificant murmurs may be important in that they may dictate the initiation of bacterial endocarditis prophylaxis, and may assist in the diagnosis of chest pain problems as well as in the consideration of complications which occur after infarction.

The author wishes to thank Dr. Ronald Fox for his help in performing the phonocardiograms herein.

References

1. Leatham, A.: Systolic Murmurs, Circ. 17:601, 1959.
2. Osmundson, P; Callahan, J., and Edwards, J.: Mitral Insufficiency From Ruptured Chordae Tendineae Simulating Aortic Stenosis, Proc. Staff Meet. Mayo Clin. 33:235, 1958.
3. Ronan, J. A.; Perloff, J. K., and Harvey, W. P.: Systolic Clicks and the Late Systolic Murmur; Intracardiac Phonocardiographic Evidence of Their Mitral Valve Origin, Am. Heart. J. 70:319, 1965.
4. Leon, D. F.; Leonard, J. J.; Kroetz, F. W.; Page, W. L.; Shaner, J. A., and Lancaster, J. F.: Late Systolic Murmurs, Clicks and Whoops Arising From the Mitral Valve: Transseptal Intracardiac Phonocardiographic Analysis, Am. Heart J. 72:325, 1966.

5. Wood, P.: Aortic Stenosis, Am. J. Cardiol. 1:553, 1958.
6. Ikram, H.; Nixon, P. G. F., and Fox, J. A.: Hemodynamic Implications of Bisferiens Pulse, Brit. Heart. J. 26:452, 1964.
7. Braunwald, E.; Lambrew, C. T.; Rockoff, S. D.; Ross, J., and Morrow, A. G.: Idiopathic Hypertrophic Subaortic Stenosis. Description of the Disease Based upon an Analysis of 64 Patients, Circ. 30 (Supp. 4) 1964.
8. Elkins, R. C.; Morrow, A. G.; Vasko, J. S., and Braunwald, E.: Effects of Mitral Regurgitation on Pattern of Instantaneous Aortic Blood Flow, Circ. 36:45, 1967.
9. Tafur, E.; Cohen, L. S., and Levine, H. D.: Normal Apex Cardiogram, Circ. 30:381, 1964.
10. Dover, J. C.; Langley, J. O.; Dodson, W. H., and Eddleman, E. E. Jr.: Clinical and Kinetocardiographic Studies of Paradoxical Precordial Motion, Am. Heart. J. 63:775, 1962.
11. Tafur, E.; Cohen, L. S., and Levine, H. D.: Apex Cardiogram in Left Ventricular Outflow Tract Obstruction. Circ. 30:392, 1964.
12. Hurst, J. W. and Schlant, R. C.: Examination of the Heart. Part 3. Inspection and Palpation of the Anterior Chest, Am. Heart Assoc. 1965.
13. Eddleman, E. E. Jr. and Langley, J. O. : Paradoxical Pulsation of Precordium in Myocardial Infarction and Angina Pectoris, Am. Heart. J. 63:579, 1962.
14. Beck, W.; Schrire, V.; Vogelpoel, L.; Nellen, M., and Swanepoel, A.: Hemodynamic Effects of Amyl Nitrite and Phenylephrine on the Normal Human Circulation and Their Relationship to Changes in Cardiac Murmurs, Am. J. Cardiol. 8:341, 1961.
15. Burch, G. E.; DePasquale, N., and Phillips, J. H.: Papillary Muscle Syndrome, J.A.M.A. 204:249, 1968.
16. Herman, M. V.; Heinle, R. A.; Klein, M. D., and Gorlin, R.: Localized Disorders in Myocardial Contraction. Asynergy and Its Role in Congestive Heart Failure, New England. J. Med. 277:222, 1967.
17. LeBauer, E. J.; Perloff, J. K., and Keliher, T. F.: Isolated Systolic Click with Bacterial Endocarditis, Am. Heart J. 73:534, 1967.

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editorial comment

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The revival of interest in the physical findings in present day cardiology is a direct consequence of current advances in technology. Cardiac catheterization and angiocardiography allows detailed study of both the anatomical and physiopathological disturbances that accompany the different categories of heart diseases. In this way, we have been able to correlate physical findings at the bedside with the fine details of the cardiac abnormalities. The need for more precise information continues to be pressing, in view of the advances in cardiac surgery and the availability of treatment for a vast number of cardiological situations.

Dr. Gordon's timely review of the evaluation of systolic murmurs stresses how properly recorded and adequately interpreted information gathered at the bedside can add to our efficiency in the diagnosis and also to the understanding of the pathogenesis of heart disease. This has important implications from the therapeutic standpoint as well. It is not only necessary to identify the murmur properly and determine its timing within the cardiac cycle, as well as its "morphology," but also to interpret such murmurs in view of the "company they keep": venous and arterial pulses, chest wall movements and variations that may be produced by simple maneuvers such as the Valsalva, squatting, deep inspiration, amyl nitrite, and post-extrasystolic cycles among others.

The recent confirmation that late systolic murmurs preceded by a systolic click are not due to extracardiac factors, but actually caused by structural abnormalities of the valvular apparatus, is important for better understanding the function of the mitral valve as well as the therapeutic implications of interpretation.

Perhaps even more important is the exciting fact that there seems to be no end in sight to the wealth of information that may be derived from bedside observation of the cardiac patient.

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Bronchogenic Carcinoma

Management at University of Florida Teaching Hospital

William B. Nickell, M.D., Thomas D. Bartley, M.D. and Myron W. Wheat, M.D.

Overall five-year survival after diagnosis and surgical treatment of bronchogenic carcinoma has been 3% to 12%.[1-3] Other than improvements in surgical technique, no real advance in therapy has been forthcoming, although radiotherapy continues to provide some palliation and occasional survivors. Preoperative irradiation has certainly improved survival in superior sulcus tumors.[4]

In spite of the apparent dismal outlook, we have persisted with an aggressive attitude toward bronchogenic carcinoma, believing this to be the only hope for long survival. In order to evaluate this policy, the cases of bronchogenic carcinoma seen on the thoracic surgical service of the W. A. Shands Teaching Hospital at the University of Florida College of Medicine from 1958 to 1965 have been reviewed.

Clinical Features

Four hundred and two patients with histologically proven bronchogenic carcinoma followed at least three years comprised the clinical material. There were 41 females and 361 males, with the youngest 31 years and the oldest 86 years. The average age of all patients was 60 years and that of survivors 61 years. The major complaint was pain in the chest or back and cough. This is significant since most smokers have this type of symptom for years without patient or physician concern. The other common symptoms also related to the respiratory tract. An asymptomatic mass on chest roentgenogram was the presenting complaint in only 9% of the entire series, but 20% of the survivors. Except for one complaint of shoulder pain and one of clubbing, major symptoms of survivors were limited to respiratory complaints or chest pain. This is in keeping with the findings of Feinstein[1] that essentially all survivors are either asymptomatic or have pulmonic symptoms only.

The most common abnormal physical finding was altered breath sounds, followed by palpable lymph nodes and liver, each occurring in about one fourth of the patients. Except in those instances where nodes gave a positive diagnosis on biopsy, physical findings were of little value.

Diagnosis

Our approach to diagnosis was primarily clinical. Patients were first evaluated by physical examination and specific tests ordered accordingly. Routinely, three to six sputums were collected. In 44 patients of the entire series, neoplastic cells were found in the sputum when a diagnosis could not be made by any other means preoperatively. A preoperative definitive diagnosis was possible in only one third of all patients by bronchoscopy, but in two thirds of the examinations some abnormality was seen. Roentgenographic examination of the chest remained the primary basis for exploration. Without specific indications, a bone survey, liver scan, mediastinoscopy or exploratory, laparotomy were not done.

Prescalene lymph node biopsy was done only in those patients having indications such as palpable supraclavicular nodes, or to avoid thoracotomy in patients deemed unresectable because of age, limited ventilatory function, or roentgenographic evidence of extensive intrathoracic disease. Slightly over one third of these selected prescalene lymph node biopsies were positive.

Anaplastic lesions made up almost 20% of the bronchogenic carcinoma cell types. Cytologically positive sputums were determined to be epidermoid carcinoma in cell type in 24 cases or 60% of the time. Alveolar cell and adenocarcinoma together represented less than 10% of the series.

Treatment

The preferred treatment was lobectomy. A standard pneumonectomy was done when necessary. If suspicious mediastinal lymph nodes were found, and proved positive upon biopsy, postoper-

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Presented at annual meeting of American Thoracic Society, Houston, Texas, May, 1968.

ative irradiation was given. The same procedure was followed if either gross or microscopic tumor was left at the margin of resection. Palliative resections were done when indicated to control symptoms, and when increased survival was a reasonable possibility. Tumors deemed nonresectable on exploration were marked with silver clips for postoperative irradiation.

Results

One hundred and ninety-two thoracotomies were performed from 1958 through 1965, and 51% of these were resected for cure (Table 1). This is a surgical experience similar to others.[5] Forty-two percent were lobectomies. Lobectomy and pneumonectomy each had about 10% mortality. Most series have reported a higher mortality with pneumonectomy primarily due to respiratory insufficiency.[6,7] The operative mortality which includes a 4% mortality from exploratory thoracotomy was 7.8% overall. Deaths from all causes, up to 30 days postoperatively, were counted.

The outcome of 192 thoracotomies from 1958 through 1965 is shown in Table 2. One hundred and two or 53% of these were performed without a preoperative diagnosis. Fifty-one or 50% were resected for cure, and 20 or 40% of those resected survived three years. When the thoracotomy was performed with a preoperative diagnosis, 55% could be resected, but only 20% of those resected survived three years. Those patients explored for diagnosis—with more peripheral lesions—had a two times better survival than those in whom a preoperative diagnosis was made. That those with a preoperative diagnosis and usually more central lesions were resected more frequently is not readily understood, but may be partially explained because resections of peripheral lesions were considered palliative if the pleura was involved.

Of the 22 patients who had palliative resections, eight or 36% survived over 18 months, and all eight were symptom-free at least 15 months. The most significant palliation was obtained in three patients who had hemoptysis and were completely relieved of this symptom. The longest survivor was 28 months with epidermoid carcinoma. The next longest survivor had undifferentiated carcinoma and lived 25 months, 18 of them symptom-free. The findings on those receiving significant benefit from palliative resection are summarized in Table 3. Hyde and his associates[8] have shown the average survival of all patients after diagnosis of bronchogenic carcinoma to be about 11 months, so these patients received significant increase in survival as well as palliation. In addition, occasional long-term survival may result.

Table 4 shows that eight patients treated by irradiation alone, including one patient with superior sulcus tumor, survived three years and are free of disease. Two of the four survivors with undifferentiated carcinoma treated with irradiation were unresectable by bronchoscopy. One had carcinoma in a rib obtained at biopsy and one had neoplastic cells present with pleural fluid. Of the patients with epidermoid carcinoma, two were proven by bronchoscopic biopsy and two by cytology. Another patient with gross tumor at the line of resection treated by irradiation postoperatively survived three years.

Epidermoid carcinoma without lymphatic or blood vessel invasion treated surgically gave 21% of the three year survivors, the largest group of the series of 192 patients (Table 4). The second largest group at 11% were four patients with large cell undifferentiated carcinoma who were treated with irradiation alone. Insufficient tissue was available on the patients in the second group to determine lymphatic and blood vessel invasion. There were also four patients with epidermoid carcinoma with blood vessel invasion and negative lymphatics. Three patients with epidermoid carcinoma and blood vessel invasion constituted the third largest group with 8% surviving three years.

Table 1.—Bronchogenic Carcinoma at the University of Florida Teaching Hospital, 1958-1965, Surgical Experience, 402 Cases.

		Percent of Total Cases
192	Thoracotomies	47%
98	Resection for cure	24%
	56 pneumonectomies	
	42 lobectomies	
22	Palliative resections	5.5%
	11 pneumonectomies	
	11 lobectomies	

Table 2.—Surgical Results, 1958-1965.

192 Thoracotomies
- 90 Thoracotomies with preoperative diagnosis
  - 50 resection for cure
    - 38 pneumonectomies
      - 7 three year survivors
    - 12 lobectomies
      - 3 three year survivors
  - 102 Explored for diagnosis
    - 51 resection for cure
      - 18 pneumonectomies
        - 6 three year survivors
      - 33 lobectomies
        - 14 three year survivors

Of the 120 patients from 1958 to 1965 who had resections, 54 or 45% had positive lymph node involvement. One fourth (6/26) of the three year survivors treated by surgery had lymph node involvement. This means only 11% of patients with tumor in lymph nodes undergoing resection survived three years compared with 18% for all patients having resection. About one third of the time, lymph node involvement was not suspected preoperatively.

Including those patients treated by irradiation therapy, an overall three year survival of 9.4% was obtained. Irradiation as the sole means of therapy provided eight patients or 2% of the three year survivors. Five of these eight patients had epidermoid carcinoma, two had sputum diagnosis only, and one had undifferentiated carcinoma.

The number of patients available in this study for five year follow-up was small (Table 5) so three year survival figures were used throughout. Although presentation of five year survival data is customary the difference in three and five year survival has been shown to be insignificant[9], so that three year survivals were thought to be valid for the purposes of this paper.

Discussion

Central nervous system involvement, obvious metastases, gross hilar invasion, and other contraindications to surgery for bronchogenic carcinoma are well known. Asymptomatic patients with small peripheral nodules without apparent extension represent the other end of the spectrum and would be surgical candidates by almost everyone's criteria. In between lie about 30% of the patients,[10] usually of advanced age, with varying degrees of hilar involvement, marginal pulmonary function and cardiovascular reserve. A diagnosis may not be possible without surgery. Though clues to ultimate survival can be obtained from

Table 3.—Palliative Resections with Increased Survival.

Symptom	Procedure	Histology	Why Palliative	Survival Months
Hemoptysis	P	Epidermoid	Positive corinal + interbronchial nodes	28 (24)*
Hemoptysis	P	Epidermoid	Tumor in margin	19 (16)
Cough and flu	P	Epidermoid	+Node line of resection	19 (15)
Arthritis	P	Undifferentiated	Interbronchial nodes	25 (18)
SOB and hemoptysis	P	Epidermoid	Interbronchial nodes	24 (21)
Chest pain	L	Undifferentiated	Stuck to chest wall and subclavian artery	18 (15)
Recurrent colds	P	Epidermoid	Tumor carina	20 (17)
Ant. chest pain	P	Epidermoid	Tumor supraclavicular nodes	21 (15)

P — Pneumonectomy
L — Lobectomy
*Months symptom-free

Table 4.—Three Year Survival by Histology.

	Epidermoid	Adeno	Mixed Adeno and Aveolar Epidermoid		Undifferentiated Large Cell	Undifferentiated Small Cell
Negative blood vessel and lymphatic invasion and negative nodes	8 1B	0	2S	2S	0	0
Positive blood vessel invasions, negative lymphatic and nodes involvement	4S 1B	1S	0	0	1S	0
Positive nodes, negative blood vessel invasion	1S 2B	0	0	0	0	0
Positive nodes and positive lymphatic and lymph node involvement	3S	1S	0	0	1S	0
Not otherwise classified (biopsy only)	1S 2X 1B	0	0	0	4X	0
Cytology	2X					
Total: 38	26	2	2	2	6	0

S — Surgery
X — Irradiation
B — Both

Table 5.—Bronchogenic Carcinoma at the University of Florida Teaching Hospital, 1958-1965.

5 Year Survival 245 Cases (1958-1963) 6.5% (16)		
Surgery	Irradiation	Both
12(4.9%)	3(1.3%)*	1(0.3%)
3 Year Survival 402 Cases (1958-1965) 9.4% (38)		
Surgery	Irradiation	Both
25(6.2%)	8(2%)	5(1.2%)

*Does not include one five year survivor evaluated and treated as outpatient.

symptoms and physical findings, bronchoscopy and other procedures, exploratory thoracotomy must be performed on all patients without obvious metastases or clinical contraindications. That is especially true in the somewhat more peripheral lesion when a diagnosis cannot be established preoperatively. Our results show that these bronchogenic carcinomas can be controlled two times more frequently than when a definitive diagnosis was possible preoperatively (40% compared to 20%).

The burden should not be on the surgeon to prove resectability prior to thoracotomy and patients should not be denied thoracotomy on the basis of the "natural history" of their disease.[10] The only certainty at this time in the natural history of bronchogenic carcinoma is that in individual cases the natural history cannot be predicted.

Exploratory thoracotomy, even in the aged, is a relatively innocuous procedure in the hands of experienced surgeons giving morbidity and mortality rates that are an acceptable trade for the assurance of a tissue diagnosis, unquestionable determination of resectability, and a chance for long-term survival. This has recently been investigated by Maurer[11] who found a mortality of only 3.83% from 340 major intrathoracic procedures on patients over 60 years of age.

Determination of resectability by bronchoscopy is inaccurate unless carcinoma is obviously present proximal to the line of contemplated resection. Mediastinoscopy and angiography are recommended by some to obviate thoracotomies by improving assessment of resectability. These procedures have about a 20% false negative result,[12] with no real data available on false positives. If a lymph node dissection is planned with resection of the carcinoma, the presence of enlarged nodes with or without tumor is not in itself a contraindication to resection. Therefore, most patients should undergo exploratory thoracotomy for a definitive answer as to resectability.

Histologic evidence of undifferentiated carcinoma and node or blood vessel involvement should not necessarily deter exploration or aggressive therapy. Fifteen percent of our three year survivors were in this group. Should resection be impossible, aggressive irradiation therapy is mandatory. Thirty-one percent of our three year survivors were in this group.

Summary

Four hundred and two patients with proven bronchogenic carcinoma are reviewed. One hundred and ninety-two thoracotomies were performed and 51% were resected for cure; 42% were lobectomies. One hundred and two thoracotomies were performed without a preoperative diagnosis. Our results indicate that:

Exploratory thoracotomy should be performed in all patients presenting with a lung mass and symptoms of bronchogenic carcinoma without obvious distant metastases or clinical contraindications.

The plan for therapy should not depend upon or be deterred by lack of histologic diagnosis or unquestionable resectability prior to exploration.

Fifty percent of patients explored when a preoperative diagnosis could not be made by the usual means were resectable, and 40% of those patients resected survived three years.

Aggressive postoperative irradiation therapy improves survival in patients who are not resectable or in whom the cancer is incompletely removed.

Palliative resection for bronchogenic carcinoma in selected patients can give significant relief of symptoms and occasional prolonged survival.

References

1. Feinstein, A. R.: Symptomatic Patterns Biologic Behavior and Prognosis in Cancer of Lung, Ann. Int. Med. 161:27-43, 1964.
2. Reinhoff, W. F. III; Talbert, J. L., and Wood, S.: Bronchogenic Carcinoma: Study of Cases Treated at Johns Hopkins Hospital from 1933 to 1958, Ann. Surg. 161:674-684, 1965.
3. Shimken, M. B.; Connelly, R. R.; Marcus, S. C., and Cutler, S. J.: Pneumonectomy and Lobectomy in Bronchogenic Carcinoma, J. Thor. & Cardiov. Surg. 44:503-519, 1965.
4. Smart, J.: Can Lung Cancer Be Cured by Irradiation Alone? J.A.M.A. 195:1034-1035, 1966.
5. Sensinig, D. M.; Rossi, N. P., and Ehrenhaft, J. L.: Surgical Treatment of Bronchogenic Carcinoma, Surg., Gynec. & Obst. 116:279-284, 1963.
6. Higgins, G. A. and Beebe, G. W.: Bronchogenic Carcinoma, Arch. Surg. 94:539-549, 1967.
7. Watson, W. L.: Evolution of Radical Pneumonectomy and Five-year End Results, Cancer 9:1167-1172, 1956.
8. Hyde, L.; Yee, J.; Wilson, R., and Patno, M. E.: Cell Type and Natural History of Lung Cancer, J.A.M.A. 193:52-54, 1965.
9. Ackeman, L. V. and de Regato, J. A.: Cancer Diagnosis, Treatment and Prognosis. Second Edition. St. Louis, C. V. Mosby Co., 1954. Part 1, page 467.
10. Paulson, D.: Philosophy of Treatment for Bronchogenic Carcinoma, Ann. Thor. Surg. 5:289-299, 1968.
11. Maurer, E. R.: Major Thoracic Surgery After Sixty, Ann. Thor. Surg. 2:806-813, 1966.
12. Bergh, N. P. and Schersten, T.: Bronchogenic Carcinoma, Acta Chirur. Scandinav. Supp. 347:3-42, 1964.

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Staphylococcal Food Poisoning

Report of an Outbreak

Lawrence P. Levitt, M.D., Charles Hartwig, Sc.D., Phillip Jones, B.A. and Philip Adler, M.D.

In 1967, 273 outbreaks of foodborne illness involving 22,171 persons were reported to the National Communicable Disease Center.[1] In 41% of the outbreaks, the etiology of the illnesses was unknown or unconfirmed. This report illustrates simple epidemiologic and laboratory techniques used in establishing the etiology of a foodborne outbreak in a small Florida community.

The Outbreak

On Thursday, Aug. 22, 1968, the health department in Hillsborough County, Florida was notified that several persons had become ill after attending a church picnic at noon. An investigation was begun immediately.

Fifty-six persons, 14 adults and 42 children, attended the picnic in Brandon, Florida and 44 (79%) became ill after consuming some or all of the following items: ham, corn on the cob, baked apple, bread, a non-carbonated soft drink, and water. Paper plates and paper cups were used. Symptoms included nausea, vomiting, and abdominal cramps, followed in some patients by mild diarrhea. Fever was usually absent. All recovered within 24 hours of onset.

Questionnaires were completed on 37 of the 56 persons who attended the picnic. The results of food history analysis are shown in Table 1. The only significant difference in attack rates between eaters and non-eaters was for ham (80% vs. 0%). Chi-square for this comparison = 26.7 ($p < .0001$).

The time of onset of illness in the 24 ill persons who filled out the questionnaire is shown in Figure 1. The average incubation period was 2.8 hours.

The ham was cooked on Monday, August 19, at 325 F. for five hours, but not refrigerated until Tuesday evening, August 20. Water was found in the refrigerator on Wednesday morning, suggesting that it had not functioned properly. The ham was taken to the camp site on Thursday at 8:00 a.m. and served at noon. The temperature at that time was 89 F.

Laboratory investigation revealed three coagulase positive staphylococcal isolates from five vomitus specimens from ill children and a coagulase positive staphylococcal isolate from the ham. The coagulase positive staphylococcal plate count for the ham was 16,900,000 organisms per gram. No enteric pathogens or staphylococci could be cultured from the soft drink. A coagulase positive staphylococcus was isolated from a throat swab of one of the two food handlers. Neither food handler had any skin lesions, and neither was involved in serving the food at the picnic.

Phage typing at the National Communicable Disease Center on the three vomitus isolates, ham isolate, and food handler isolate revealed that all were type 54-75-77.

Discussion

Staphylococcal poisoning is probably the most common cause of foodborne disease outbreaks.[2] Staphylococcus was the pathogen most commonly incriminated in the 273 outbreaks reported to the National Communicable Disease Center in 1967 and was responsible for 1,339 of the reported cases. The true number of cases of staphylococcal food poisoning in the United States each year is no doubt much higher. Epidemiologic techniques, such as food history analysis, calculation of incubation period and use of phage typing, frequently enable the etiology and pathogenesis of staphylococcal outbreaks to be established. In the present outbreak, the ham was probably contaminated by the food handler and then with inadequate refrigeration provided a culture medium for the staphylococcus.

Dr. Levitt is epidemic intelligence service officer, National Communicable Disease Center, U. S. Public Health Service, located in Hillsborough County Health Department; Dr. Hartwig, director, regional laboratory, Florida Division of Health; Mr. Jones, supervisor of food sanitation, Hillsborough County Health Department, and Dr. Adler, pediatrician, all located in Tampa.

Figure 1 INCUBATION PERIODS, STAPHYLOCOCCAL FOOD POISONING, BRANDON, FLORIDA, AUGUST 22, 1968

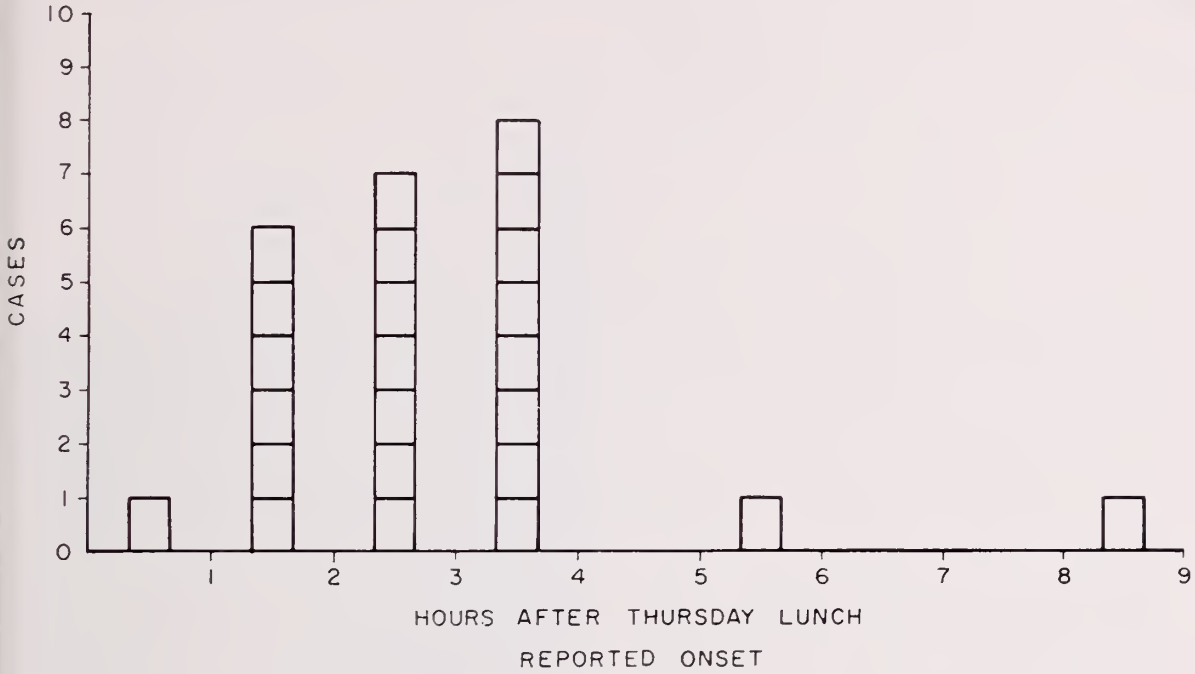


TABLE 1.—STAPHYLOCOCCAL FOOD POISONING, BRANDON, FLA., AUG. 22, 1968

	Persons Who Ate Specified Food				Persons Who Did Not Eat Specified Food			
Food	Ill	Not Ill	Total	% Ill	Ill	Not Ill	Total	% Ill
Ham	24	6	30	80%	0	7	7	(0%)
Corn	22	13	35	63%	2	0	2	(100%)
Apple	21	9	30	70%	3	4	7	(43%)
Bread	20	6	26	77%	4	7	11	(36%)
Soft Drink	24	13	37	65%	0	0	0	—
Water	20	8	28	71%	4	5	9	(44%)

The symptoms of staphylococcal food poisoning are caused by the enterotoxin, which remains potent even after 67 days in a refrigerator or 30 minutes of boiling.[3] Thus, proper food handling, including adequate refrigeration, remains the best method of preventing staphylococcal food poisoning.

Summary

An outbreak of staphylococcal food poisoning in Florida affected 44 persons. Using a combination of epidemiologic and laboratory techniques, including food history analysis, the epidemic curve and phage typing, investigators identified ham as the responsible food; the incubation period was found to be 2.8 hours, and a food handler was implicated. Proper refrigeration to prevent such outbreaks is stressed.

The authors gratefully acknowledge the assistance in this investigation of Dr. John S. Neill, director, Hillsborough County Health Department and his staff and Dr. Peter B. Smith, chief, Bacterial Reference Unit, National Communicable Disease Center, Atlanta, Georgia, and his staff.

References

1. United States Department of Health, Education and Welfare, Public Health Service, National Communicable Disease Center: Foodborne Outbreaks, Status Report for 1967. Atlanta, Georgia, 1968.
2. Dack, G.: Food Poisoning, Chapter V. Staphylococcus Food Poisoning, Univ. Chicago Press, 1956.
3. Jordan, E. O.; Dack, G. M., and Woolpert, O.: Effect of Heat, Storage, and Chlorination on Toxicity of Staphylococcus Filtrates, J. Prevent. Med. 5:383-386, 1931.

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Cervical Thymic Cyst

Victor Dabby, M.D.

Most clinicians tend to delegate a mysterious role in health and disease to the thymus. Commonly referred to as a gland, it has no ductal structure and may not be an endocrine organ. The thymus is rarely mentioned and frequently forgotten in any differential diagnosis except in chest tumors where it accounts for about 10% of mediastinal neoplasms. It has attracted attention because of its relation to rare and bizarre diseases such as myasthenia gravis, agammaglobulinemia, Cushing's syndrome, hirsutism, and agenesis of erythrocytes.

The case reported here is that of a thymic tumor seen as a large cystic mass in the neck. It was considered unusual since most of these tumors present in the mediastinum as a neoplasm or hyperplasia. The thymus is not always included in differential diagnoses; however, it does exist and embryologically arises bilaterally in the neck.

A review of the embryology of the thymus will assist in better understanding the location of the cystic mass. The third pharyngeal pouch gives rise to the parathyroid glands and the thymus. During descent in the neck, as a rule the parathyroids remain posterior to the thyroid gland while the right and left thymic glands continue to descend to the anterior superior mediastinum where they become permanently joined behind the sternum. During descent, bits of thymic tissue occasionally are pinched off and lodged in the neck, thus accounting for the rare ectopic thymic cervical tumors or cysts.

Report of Case

The patient, a nine-year-old Negro boy, was brought in by his mother because of a progressive, painless swelling in the left side of the neck of seven to eight months' duration. He was asymptomatic otherwise, and his activities and development were normal. Examination of the neck revealed a large lateral cystic mass extending from the left submandibular region to the clavicle. The admission diagnosis was branchial cleft cyst. During surgery the mass was found to be cystic in its submandibular region and mid-cervical portions, but distally it became solid, especially in its retrosternal attachment (Fig. 1). The entire mass was dissected without difficulty, and the diagnosis of thymic cyst and hyperplasia was revealed on frozen and permanent sections (Fig. 2). The patient tolerated surgery and anesthesia well and was discharged after an uneventful convalescence.



Figure 1.

Discussion

Benign solitary thymic tumors with or without myasthenia may be found in aberrant positions. Such diverse locations have been described as the parenchyma of the lung, the pleural space and neck. A cyst which developed in thymic tissue that remained in the neck was reported by Weller, Pearse and Rapoport. Degeneration with hemorrhage within a thymoma can be so extensive that only a fibrous tissue shell with little remnants of thymic tissue can be seen.

It is well known that thymic hyperplasia and thymomas are associated with myasthenia gravis in an incidence ranging from a low of 14% to a high of 75%. It was apparent from the postoperative course that this patient did not have

the condition. Patients who do have the condition tolerate curari-like drugs poorly and develop profound, prolonged paralysis following the use of even small quantities of blocking agents.

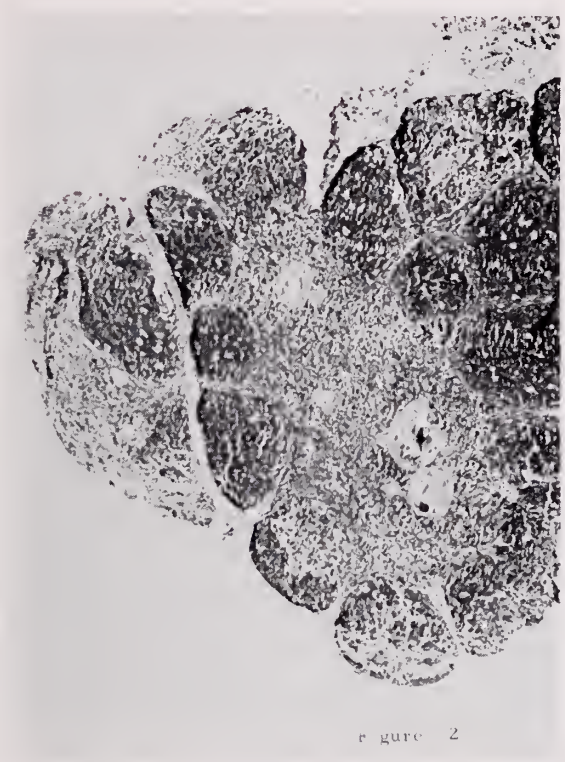


Figure 2.

When patients present with tumors or cysts in the neck, the possibility of a cervical thymic cyst should be considered and particular inquiry made concerning any symptoms suggesting myasthenia gravis. In the event this condition is present, serious problems in anesthesia and surgery could arise. Drugs such as curari, enectine, streptomycin and neomycin should be avoided.

Summary

A case of thymic cervical cyst is presented, and an embryological explanation for its location is discussed. When confronted with cervical tumors and cysts, the possibility of myasthenia gravis should be considered. If present, the use of muscle relaxant drugs should be avoided.

Bibliography

Bayrd, E. D. and Bernatz, P. E.: Benign Thymoma and Agenesis of Erythrocytes, J.A.M.A. 163:723-727, 1957.

Bernatz, P. E.: Thymoma, J. Thorac. Cardiov. Surg. 42:424, 1961.

Boyd, D. and Gerard, F.: Reasons for Thymectomy, Modern Med. (Dec. 15) 1960.

Castleman, B.: Tumors of the Thymus Gland, Armed Forces Institute of Pathology.

Morgan, W. Jr.: Malignant Thymoma and Myasthenia Gravis. Report of Case and Review of Literature, New England J. M. 253 (Oct. 13) 1955.

Ochsner, A. and Burch, A.: Tumors of the Thymus, Surg. Clin. 46:1437, 1966.

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Rupture of the Spleen Following Septic Embolization With Splenic Infarction

Sanford G. Kimball, M.D. and David A. Nathan, M.D.

Septic embolization with splenic infarction and rupture is a rare occurrence. In subacute bacterial endocarditis the incidence of splenic infarction ranges from 40% to 60%.[1] Rosenberg[2] reported an instance of subacute bacterial endocarditis with rupture of the spleen and cited 11 additional patients in a review of the literature. This complication is considered a clinical rarity and, therefore, is worthy of reporting.

Report of Case

Speech aphasia and right-sided hemiparesis suddenly developed in a 53-year-old physician and he was admitted to the hospital immediately. Three days previously he noted transient pleuritic chest pain not associated with fever, cough or hemoptysis. A focal area of painful redness appeared on the dorsum of the left foot. Two weeks previously he had minor dental treatment for gingivitis, repair of carious teeth, and drainage of an abscess.

Past medical history revealed intermittent labile hypertension, mild diabetes and gout. Upon examination there was expressive aphasia, mild right facial paresis, slight drooping of the right foot, nonreactive deep tendon reflexes and a negative Babinski reflex bilaterally.

The hemoglobin was 14.3 Gm. per 100 ml.; hematocrit 42% and white cell count 15,300. The sedimentation rate was 46, fasting blood sugar 150 mg.%. Serum protein electrophoresis was normal, and x-rays of the chest and skull revealed no abnormalities. The electrocardiogram was within normal limits. The electroencephalogram was compatible with impaired circulation in the left frontotemporal area.

Initial diagnosis was left middle cerebral artery thrombosis.

On the eighth hospital day, chills and fever to 104 degrees (R) developed. Three cultures of the blood, urine and stool were negative. The white blood cell count rose to 20,000 with a moderate shift to the left. Chest x-ray revealed a slight haziness in the left lower lobe compatible with pulmonary infarction. There followed a progressive drop in the hematocrit without the appearance of cardiac murmurs, splenomegaly, petechiae or Osler's nodes. Further blood cultures revealed an organism identified as a streptobacillus sensitive to Chloromycetin and Streptomycin. Chloromycetin 2 Gm. per day intravenously and Streptomycin 1 Gm. per day intramuscularly were given. Dental x-rays revealed a periapical abscess at the root of the right first molar. This was extracted uneventfully and cultures of the socket grew gram negative staphylococci and enterococci sensitive to Chloromycetin and Streptomycin. Two days later, an embolus in the left radial artery occurred. Although the septic course continued for seven additional days, expressive aphasia and paresis progressively disappeared. Four weeks later, a short inconstant high pitched apical systolic murmur became audible.

On the thirty-third day, an oculogyric crisis developed, suddenly followed by coma, cyanosis and severe hypotension. The hematocrit was 33%. Emergency resuscitative measures and blood transfusions aided in rapid clinical improvement within 24 hours. Shortly thereafter, pains in the left lateral subcostal region aggravated by inspiration was followed by profound shock. The blood pressure was unobtainable. The hematocrit was 27% and hemoglobin 9 Gm. Splenic rupture secondary to massive splenic infarction was suspected. Emergency laparotomy revealed a massive intraperitoneal hemorrhage due to a ruptured spleen. Splenectomy was performed. There was extensive infarction with abscess formation and rupture at its hilum (Fig. 1). A branch of the splenic artery was occluded with thrombus. Postoperatively, the clinical course remained afebrile, hemograms stabilized and recovery was uneventful.

Discussion

Splenic rupture secondary to embolic phenomena must always be considered whenever there is pleuritic pain in the left side of the chest, shock and rapid drop in the hemogram of a patient with septicemia even in the absence of a heart murmur, palpable spleen, abdominal signs of peritoneal irritation and negative needle aspirations of the peritoneal cavity.[3] Although these negative factors tend toward a temporizing approach, surgical intervention is not to be delayed if clinical evidence warrants a high index of suspicion. It has been stated that when abscess of the spleen occurs due to sepsis, surgery is contraindicated because of the grave prognosis of the underlying disease.[4] Our case clearly illustrates, however, that splenectomy was a life-saving procedure.

It is possible that a bacteriologic cure was accomplished at the time of surgery which may explain the complete remission of the sepsis and

From the departments of medicine and pathology, Mt. Sinai Hospital, Miami Beach.



Fig. 1. — Cross section of the spleen shows extensive areas of necrosis and softening. Dark spaces are areas of extensive hemorrhage.

rapid complete clinical cure following surgical intervention. Moreover, splenectomy to effect a bacteriologic cure in bacterial endocarditis has been reported.[5] A likely portal of entry was a dental abscess and or gingival infection activated by gingivectomy and correction of dental caries. The incidence of bacterial endocarditis arising from dental origin is common[6] and suggests that bacteriologic studies and appropriate antibiotic therapy be employed prior to surgical maneuvering for dental infection.

Summary

A rare occurrence is reported of bacterial endocarditis and infarction of the spleen which caused rupture, intraperitoneal hemorrhage and shock. Rapid removal of the ruptured spleen was a life-saving procedure.

References

1. Friedberg, C. K.: Diseases of the Heart, Third Edition, Philadelphia, W. B. Saunders Co., 1956, p. 869.
2. Rosenberg, C. A.: Rupture of Splenic Infarct and Sudden Death Complicating Course of Subacute Bacterial Endocarditis, Am. J. Med. 5:143, 1948.
3. Maughon, J. S.; Geib, P. O., and Lenhardt, H. F.: Splenic Trauma: An Increasing Problem, Surgery 49:477, 1961.
4. Wolfson, I. F.: Abscess of the Spleen. New England J. M. 230:135, 1944.
5. Lingeman, C. J.; Smith, E. B.; Battersby, J. S., and Behnke, R. H.: Subacute Bacterial Endocarditis, Arch. Int. Med. 97:309, 1956.
6. Rabinovich, S.; Evans, J.; Smith, I. M., and January, L. E.: Long Term View of Bacterial Endocarditis, Ann. Int. Med. 63:185, 1965.

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Indication—Oral contraception.

Contraindications—Thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia, undiagnosed abnormal genital bleeding.

Warnings—Watch for the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism, retinal thrombosis); if present or suspected discontinue the drug immediately.

British studies reported in April 1968[1,2] estimate there is a seven- to tenfold increase in mortality and morbidity due to thromboembolic diseases in women taking oral contraceptives. In these controlled retrospective studies, involving 36 reported deaths and 58 hospitalizations due to "idiopathic" thromboembolism, statistical evaluation indicated that the differences observed between users and non-users were highly significant. The conclusions reached in the studies are summarized in the table below:

Comparison of Mortality and Hospitalization Rates Due to Thromboembolic Disease in Users and Non-Users of Oral Contraceptives in Britain.

Category	Mortality Rates		Hospitalization Rates (Morbidity)
	Age 20-34	Age 35-44	Age 20-44
Users of Oral Contraceptives	1.5/100,000	3.9/100,000	47/100,000
Non-Users	0.2/100,000	0.5/100,000	5/100,000

No comparable studies are yet available in the United States. The British data, especially as they indicate the magnitude of the increased risk to the individual patient, cannot be applied directly to women in other countries in which the incidences of spontaneously occurring thromboembolic disease may differ.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or sudden onset of proptosis, diplopia or migraine. Withdraw medication if papilledema or retinal vascular lesions are found.

Since the safety of Ovulen in pregnancy has not been demonstrated, it is recommended that pregnancy be ruled out for any patient who has missed two consecutive periods before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the first missed period.

A small fraction of the hormone agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect on the nursing infant cannot be determined at this time.

Precautions—Pretreatment physical examination should include special reference to the breasts and pelvic organs, and a Papanicolaou smear.

Endocrine and possibly liver function tests may be affected by Ovulen. Therefore, it is recommended that such tests if abnormal be repeated after the drug has been withdrawn for two months.

Pre-existing uterine fibromyomas may increase in size under the influence of progestogen-estrogen preparations.

Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation.

In breakthrough bleeding, and all irregular vaginal bleeding, consider nonfunctional causes. Adequate diagnostic measures are indicated in undiagnosed vaginal bleeding.

Carefully observe patients with a history of psychic depression and discontinue the drug if severe depression recurs.

Any possible influence of prolonged Ovulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study.

A decrease in glucose tolerance has occurred in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be observed carefully while receiving Ovulen.

Because of the effects of estrogens on epiphyseal closure Ovulen should be used judiciously in young patients in whom bone growth is not complete.

The age of the patient constitutes no absolute limiting factor, although Ovulen therapy may mask the onset of the climacteric.

The pathologist should be informed of Ovulen therapy when relevant specimens are submitted.

Adverse Reactions—A statistically significant association has been shown between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: cerebrovascular accidents, neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement, secretion), change in weight, changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, allergic rash, rise in blood pressure in susceptible individuals, mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme and nodosum, hemorrhagic eruption, itching. The following laboratory results may be altered by oral contraceptives: hepatic function: increased sulfobromophthalein and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.



References: 1. Inman, W. H. W., and Vessey, M. P.: Brit. Med. J. 2:193-199 (April 27) 1968. 2. Vessey, M. P., and Doll, R.: Brit. Med. J. 2:199-205 (April 27) 1968.

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Florida Medical | editorial

From the Editor

Franz Stewart

The Nassau Meeting

To reach the fisherman's dock, you take off your coat, loosen your collar and press your way through the crowds at the straw market. The language you hear is English but is mellowed and changed in rhythm and accent by centuries of island isolation. An older woman sits sprawled with her legs wide apart for coolness and her calico dress tucked carefully for modesty. A black, muscular man is asleep on a display table with his feet propped on the wall.

The produce of the out islands and the sea is spread in piles on the ground and small tables. The black fishermen are cutting fish; the live wells look cool as the crayfish move about near the mass of conchs and crabs on the deck. The long, wooden sculling oars suggest years of use back and forth from the reef.

The hotel is clean, polite, and is manned largely by proud Bahamians who are trying out the responsibility of new-found government control.

Here we met. All day long for two days your agents struggled to find answers to the many facets of relationship between the Florida Medical Association and the many overlapping areas of social, economic and government activity. Here your representatives tried to make decisions, to interpret, to be aware of change. This governing body is sensitive to the individual physician through the House of Delegates.

Today there are rough edges between quality of care and delivery of care. This gives new urgency to our group activity and we physicians find ourselves struggling actively to adjust to the new-found responsibility of governing ourselves in this new situation. We are brash at times, shortsighted at times, find our group goals hard to see, but all in all we are struggling to furnish the finest and most efficient quality and quantity of care available.

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This is taken from the October 4, 1969 issue of the *Nassau Guardian and Bahamas Observer*. Until recently the appearance of a notice like this would not have caused surprise. Our parents and grandparents found these as an everyday occurrence. Perhaps we should be grateful to the A.M.A.

Study the Person at the Start

It was my privilege to be exposed to some medical students the other day. These were not juniors, or sophomores, or interns but freshmen. This was the second day of medical school. In accordance with a skillfully arranged plan they appeared in groups of ten and were taken to a patient.

What a delight to find that as a group they were quick to grasp the approach necessary to successfully discover the patient's problems. They quickly managed to approach the interview with genuine consideration for the patient and interest in determining just what was bothering this person.

This was a small group and no one can say what they will be like in this regard a few years from now but certainly we must stop and think. As a group they thought of the patient as a person and treated him as such more effectively than most sophomores or juniors.

Have we injured something in our medical education by taking the parts of a body or a series of functions and then later try to put them together again and focus on the person?

The Individual Practitioner

Clyde M. Collins, M.D.

The opinions of the late President Kennedy, the Secretary of the Department of Health, Education, and Welfare, Dr. Frank Slaughter and the faculty of the Harvard Medical School notwithstanding, the cause of the private practitioner will continue to be defended, believed in, and practiced by many members of the healing art.

Before undertaking a bitter harangue on the merits of such a way of life, the protagonist should be defined as a mature physician assuming the responsibility of one patient, deriving self-satisfaction in a job he enjoys wherein the services he provides justify the fee he charges. More accurately he is an individual who subscribes to the doctrine that it is still a patient seeking help from a physician, the latter giving help, which has been the heart and soul of medical care since Hippocrates saw patients on the Island of Kos. He further believes that this remains so, no matter what complexities are added to the social, political or economic environment in which that meeting takes place. He can so believe and so declaim because he has enormous freedom to be himself.

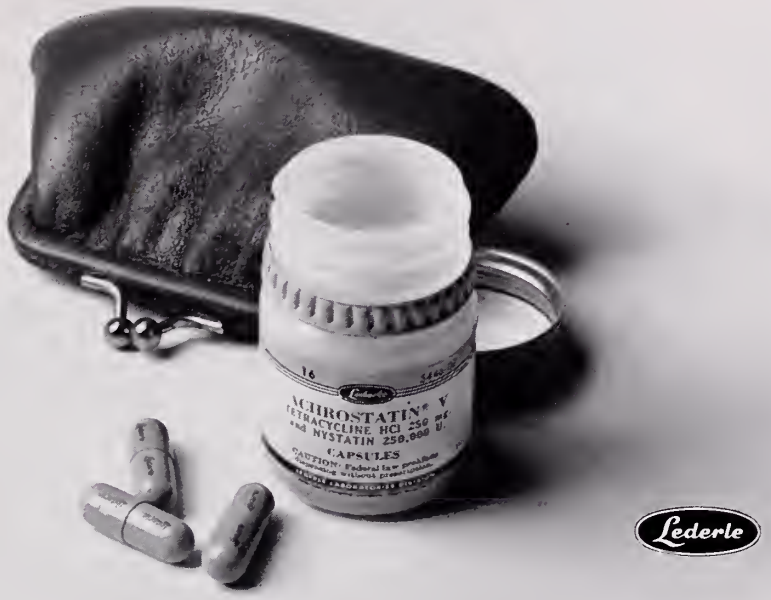
A relic of the horse and buggy days, the private practitioner puts the personal touch in his practice of medicine, providing a continuity to patient care which is priceless to mothers, patients with chronic diseases, and the aged. He is far more aware of the nuances between psychosomatic and organic diseases, being more sensitive to the distinction between the very sick and the not-so-sick patient. He intimately knows his patients and the doctors to whom he refers, and so can match patient with the doctor he thinks best can handle the problem. He sees more patients, works longer hours, but earns less, for his income is primarily from personal contact, and not from charges for ancillary services provided by paramedical personnel. More and more patients demanding hospital care and peer review of the individual practitioner's work by records, tissue and utilization committees made up of competitive colleagues stimulate him to provide increasingly good medical care. Having to cope with complaints from patients or their insurers who pay patients' bills, he is less likely to allow unneeded expenses or order unnecessary laboratory tests.

The private practitioner provides the empathy for 80% of patients seen in most practices who, though not acutely sick, require lots of time, understanding, and reassurance. And he seldom forgets the legend inscribed over the entrance to that ancient hospital, the Hotel Dieu in Paris, which reads "To cure sometimes, to relieve often, and to comfort always," for he realizes that many of the patients he sees daily are troubled primarily by symptoms arising from their own anxieties, depressions, or guilt. Medically inferior perhaps, and less comprehensive than other types of practice, psychologically his care is far better, for the confidence a physician instills often is of greater value than the actual care, and in the final analysis the quality of medical care depends on the quality of the physician in charge.

Since 98 per cent of all patients still prefer their own personal physician, should we, by disinterest or our own neglect, allow the future of our profession to be shaped by forces that control two per cent of the nation's medical service? We, the practicing physicians, are the strongest proponents of the free practice of medicine and yet how much time do we spend with medical students, members of other professions or the laity in instilling the values of such a system of practice? Somehow we must not allow methods of practice or the amount of our reimbursement to be determined by bureaucratic action; furthermore, we must prevent any third party, be it government program or health insuror, from interjecting itself between us and our patients.

Finally, in this materialistic age of changing morals, changing values and changing goals, we must not allow the virtues of the solo practitioner to be forgotten in our daily administering of health care. □

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*Jones, Georgeanna S.: Maryland Med. J. 16:45, 1967.

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A Past President Speaks

Jane Hewit
(Mrs. Linus W.)

"And will you, Jane, along with these other promises, pledge that in the years 1967-1969, you will serve as president-elect and as president of the Woman's Auxiliary to the Florida Medical Association to the best of your ability?"

Had the minister asked me those things, on that September day in 1946, I am sure I would have turned on my white satin heels and fled the scene!

But how foolish I would have been, what joy and opportunity I would have missed! As I look back on those years of service, to my Auxiliary and to you, they are two of the most wonderful and worthwhile of my life.

Although most of your wives are members of the Auxiliary, I'll wager that most of you do not know just what we do. I am also sure that you do not know how it represents you, not only in Florida but throughout the nation.

Most of you are probably aware that we are a service organization. We cannot require your wives to work on our projects but we urge them to do their share. Also, we urge them to gear their projects to your communities in order to best serve them. Most of you do not have time to do much volunteer work in your town or city, making it all the more important for your wives to so serve.

Many of our programs are geared to youth, something that appeals to most people. We endeavor to teach them a healthy and happy way of life. We show them career opportunities and urge all of those interested to look into the many opportunities in the health manpower field. We realize that the need for medical personnel increases each year and we are working to meet that need.

Our programs and pursuits in the teenage health projects throughout Florida have been followed by groups from all over the country. They write us for information, help and encouragement. They seek us out at national and regional meetings because we have had the courage and interest, with your help, to try to bring about changes in alcohol and drug abuse, and to find methods of educating the young so that they might understand about and put sex in its right perspective.

We have waged a campaign emphasizing safety of all kinds, with particular interest in the safety of our children and youth. We have caused some of your wives to consider more seriously such things as poisons, drugs, a weak stairstep, a slippery bathtub, sliding rugs and open electrical outlets. If this campaign saved only one life or prevented one injury, we consider it worthwhile.

We are working in all 50 states to clean up the things all of us are subjected to on the television screen and at the motion picture theatre. It is our belief that such daily viewing is particularly harmful to children and teenagers. This work has led to a senate investigation.

During my two years of representing the Woman's Auxiliary to the Florida Medical Association, first as president-elect then as president, I traveled many miles. My trips to Atlantic City, San Francisco, Atlanta, New Orleans, New York, Chicago, and throughout Florida, have been educational and inspirational. The women I have met, the friends I have made, the speakers I have heard, and the opportunities given me are too numerous for much detail.

Spending an evening with Shirley Temple Black, listening to senators Strom Thurmond and George Murphy, the AMA presidents, our Washington lobbyists, our AMA staff members, Ann Landers, famous physicians and theologians, are some of the highlights of my years of Auxiliary leadership. I had the privilege of taking the AMA speech course twice, something I urge you to do if given the opportunity.

It was my good fortune to serve as chair-

Mrs. Hewit is immediate past president, Woman's Auxiliary to the Florida Medical Association.

man of the Election and Tellers Committee at the national convention of the WA-AMA in New York in July. Following that meeting my position is Southern Regional Chairman-Community Health. It will be our job to find ways that county and state auxiliaries can work with other health-related groups to the advantage of all.

Not all has been joy, however; we had our troubles too! We have had lost luggage, late planes, bad weather, crowded hotels, huge long-distance bills, and the usual other headaches.

But the thing that topped them all was the "fiery finish" we had en route to the state meeting in May. As we "blazed a trail" down the state to "my" convention, our car caught fire. Almost all of the materials for the Auxiliary's House of Delegates, my file, boxes of items from National, paintings for the art show, to say nothing of personal items, were in that "loaded" car. After quite a scare we were able to extinguish the flames, move the load to a friend's car, watch a wrecker haul our "hot" vehicle away and arrive at the Americana four hours late. We left behind the file cabinet and my husband's golf clubs in order to have room for me!

We are now the possessors of a nifty fire extinguisher, a past-president's pin and many happy memories.

I wish the wife of every Florida physician could have the privilege that was mine. Your Auxiliary is among the very best, and to serve as its president has been a most happy experience.

▶ Mrs. Hewit, 3305 Mullen Avenue, Tampa 33609.

Our Mail

Dear Editor:

Just a note to tell you that I thoroughly enjoyed the many articles in the August issue of the JOURNAL.

I hope that you have other historical papers and other items on Florida.

J. R. Boulware Jr., M.D.
Lakeland

Dear Editor:

Would you be kind enough to announce in your next issue of the JOURNAL the following on behalf of the American Board of Family Practice?

The American Board of Family Practice announces that it will give its *first* examination for certification in various centers throughout the United States. The examination will be over a two-day period on February 28-March 1, 1970. Information regarding the examination and eligibility for the examination can be obtained by writing the secretary of the Board.

Nicholas J. Pisacano, M.D., Secretary
American Board of Family Practice, Inc.
Lexington, Ky.

Henry J. Babers Jr., M.D.
President, Florida Medical Association

Dear Dr. Babers:

Congratulations and appreciation for your "President's Page" in the September issue of the JOURNAL—"Judge Not." My hope is that every doctor in Florida will read it at least more than one time.

Keep up the good work you are doing for our FMA.

Edward Jelks, M.D.
Jacksonville

Dear Dr. Babers:

I read your article which appeared recently in the JOURNAL and I just wanted to take this opportunity to let you know that I couldn't agree with you more.

Don Fuqua
Member of Congress
Washington, D. C.

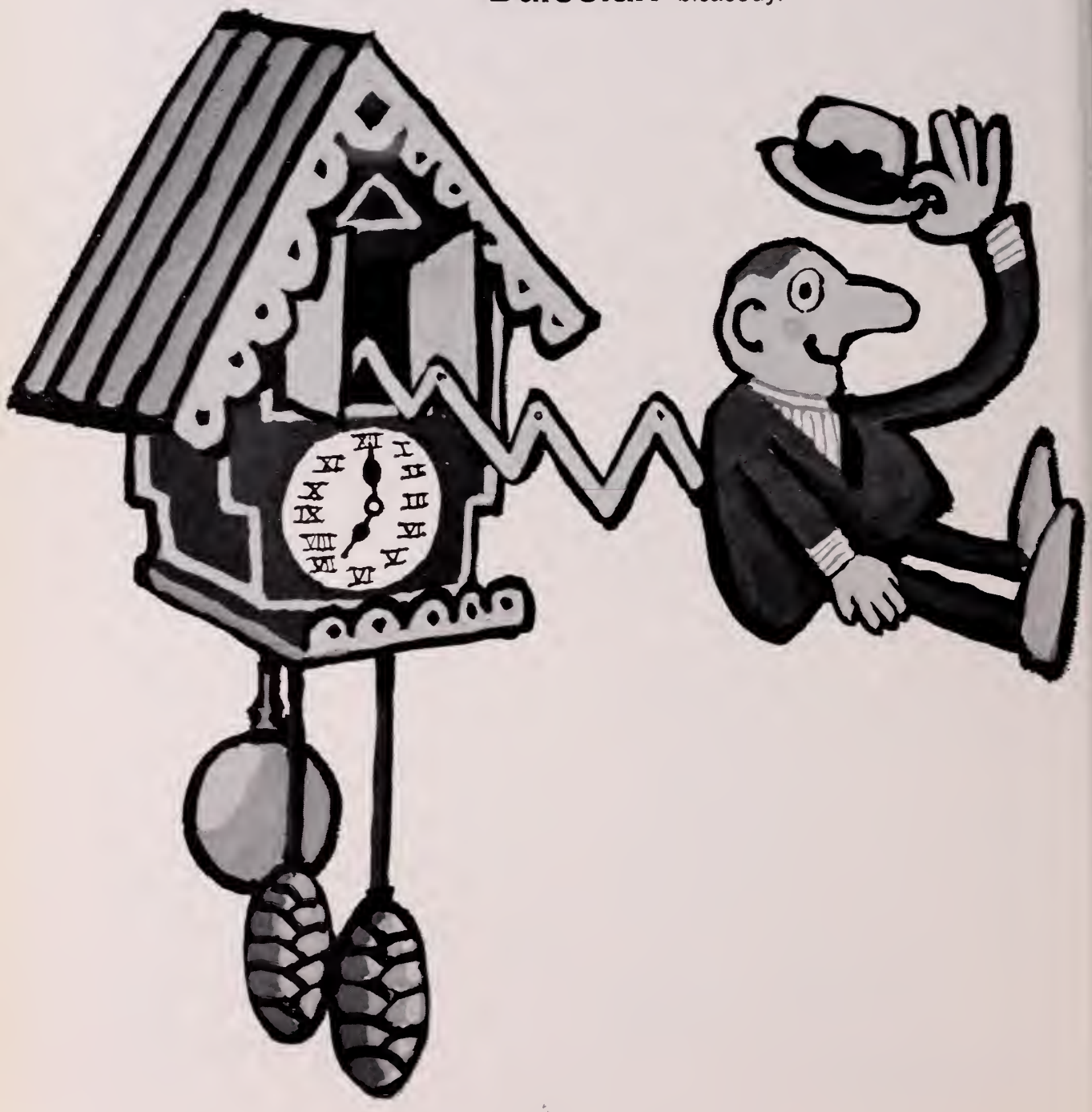
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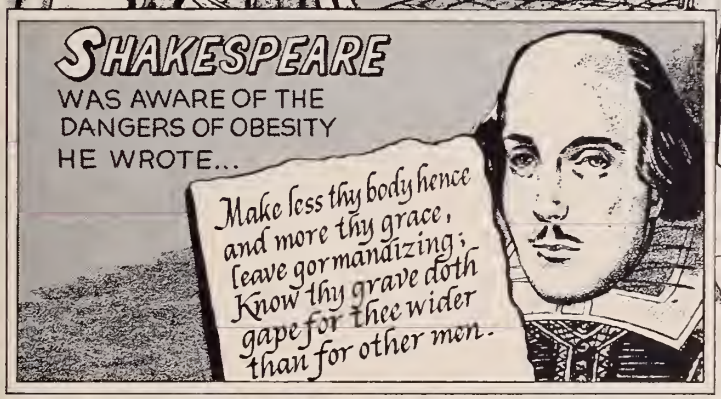
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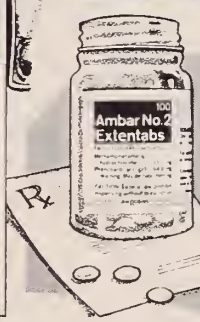


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TRANQUILIZER-ANTIDEPRESSANT

Containing perphenazine and amitriptyline HCl

For prescribing information, including indications, contraindications, warnings, precautions, and side effects, please see following page.

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INDICATIONS: Patients with moderate to severe anxiety and/or agitation and depressed mood; patients with depression in whom anxiety and/or agitation are severe; patients with depression and anxiety in association with chronic physical disease; schizophrenics with associated depressive symptoms.

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; urinary retention; pregnancy; glaucoma. Do not give in combination with MAOI drugs because of possible potentiation that may even cause death. Allow at least 2 weeks between therapies. In such patients therapy with TRIAVIL should be initiated cautiously, with gradual increase in the dosage required to obtain a satisfactory response.

WARNINGS: Patients should be warned against driving a car or operating machinery or apparatus requiring alert attention, and that response to alcohol may be potentiated.

PRECAUTIONS: Suicide is always a possibility in mental depression and may remain until significant remission occurs. Supervise patients closely in case they may require hospitalization or concomitant electroshock therapy. Untoward reactions have been reported after the combined use of antidepressant agents having various modes of activity. Accordingly, consider possibility of potentiation in combined use of antidepressants. Not recommended for use in children. Mania or hypomania may be precipitated in manic-depressives (perphenazine in TRIAVIL seems to reduce likelihood of this effect). If hypotension develops, epinephrine should not be employed,as its action is blocked and partially reversed by perphenazine. Caution patients about errors of judgment due to change in mood.

SIDE EFFECTS: Similar to those reported with either constituent alone.

Perphenazine: Should not be used indiscriminately. Use caution in patients with history of convulsive disorders or severe reactions to other phenothiazines. Likelihood of untoward actions greater with high doses. Closely supervise with any dosage. Side effects may be any of those reported with phenothiazine drugs: blood dyscrasia (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); extrapyramidal symptoms (opisthotonos, oculogyric crisis, hyperreflexia, dystonia, akathisia, dyskinesia, parkinsonism) usually controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine; severe acute hypotension (of particular concern in patients with mitral insufficiency or pheochromocytoma); skin disorders (photosensitivity, itching, erythema, urticaria, eczema, u to exfoliative dermatitis); other allergic reactions (asthma laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; endocrine disturbances (lactation, galactorrhea, disturbances of menstrual cycle); grand mal convulsions, cerebral edema; altered cerebrospinal fluid proteins; polyphagia; paradoxical excitement; photophobia; skin pigmentation; failure of ejaculation; EKG abnormalities (quinidine-like effect); reactivation of psychotic processes catatonic-like states; autonomic reactions such as drynes of the mouth, headache, nausea, vomiting, constipation, obstipation, urinary frequency, blurred vision, nasal congestion, and a change in the pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude; muscle weakness; mild insomnia; significant unexplained rise in body temperature may suggest intolerance to perphenazine, in which case discontinue. Antiemetic effect may obscure signs of toxicity due to overdosage of other drugs or make diagnosis of other disorders such as brain tumors or intestinal obstruction difficult. May potentiate central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol), atropine, heat, and phosphorous insecticides.

Amitriptyline: Careful observation of all patients recommended. Side effects include drowsiness (may occur within the first few days of therapy); dizziness; nausea; excitement; hypotension; fainting; fine tremor; jitteriness; weakness; headache; heartburn; anorexia; increased perspiration; incoordination; allergic-type reactions manifested by skin rash, swelling of face and tongue, itching; numbness and tingling of limbs, including peripheral neuropathy; activation of latent schizophrenia (however, the perphenazine content may prevent this reaction in some cases); epileptiform seizures in chronic schizophrenics; temporary confusion, disturbed concentration, or transient visual hallucinations on high doses; evidence of anticholinergic activity, such as tachycardia, dryness of mouth, blurring of vision, urinary retention, constipation, paralytic ileus; agranulocytosis; jaundice. The antidepressant activity may be evident within 3 or 4 days or may take as long as 30 days to develop adequately, and lack of response sometimes occurs. Response to medication will vary according to severity as well as type of depression present. Elderly patients and adolescents can often be managed on lower dosage levels.

For more detailed information consult your Merck Sharp and Dohme representative or see the package circular.

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The Sick Doctor

George S. Palmer, M.D.

The Florida Medical Association sponsored several amendments to our Medical Practice Act which were passed during the last session of the legislature. One of the most important, in my opinion, is in Section 458.12 (1) (n), Florida Statutes. This amendment has been called the "Sick Doctor" portion of the Medical Practice Act and is quoted as follows:

> Is unable to practice medicine with reasonable skill and safety to patients by reason of illness, drunkenness, excessive use of drugs, narcotics, chemicals or any other type of material or as a result of any mental or physical condition. In enforcing this subsection the Board shall, upon probable cause, have authority to compel a physician to submit to a mental or physical examination by physicians designated by it. Failure of a physician to submit to such examination when directed shall constitute an admission of the allegations against him unless the failure was due to circumstances beyond his control, consequent upon which a default and final order may be entered without the taking of testimony or presentation of evidence. A physician affected under this subsection shall at reasonable intervals be afforded an opportunity to demonstrate that he can resume the competent practice of medicine with reasonable skill and safety to patients.
>
> For the purpose of this subsection, every physician licensed under this chapter who shall accept the privilege to practice medicine in this state and by so practicing or by the making and filing of annual registration to practice medicine in this state shall be deemed to have *given* his consent to submit to a mental or physical examination when directed in writing by the Board and further to have waived all objections to the admissibility of the examining physicians' testimony or examination reports on the ground that the same constitute a privileged communication.
>
> In any proceeding under this subsection, neither the record of proceedings nor the orders entered by the Board shall be used against a physician in any other proceeding.

This fills a great gap which was heretofore present in your Board's ability to discipline physicians who obviously should not be practicing upon our citizens for many reasons previously mentioned. The Board is very anxious to fulfill its function and not allow incompetents to practice and thereby reflect upon competent practitioners. It is the duty of each licensed physician to report any fellow physician whom he sincerely feels is unable to practice effectively or with proper skill due to any of the reasons stated in the law. This can be done now without fear or reprisal, recrimination or embarrassment. It is also a wonderful means of rehabilitating a fellow practitioner before he does irreparable harm to a patient or does something which will cause him to lose his license completely. We must not be hesitant to adequately police ourselves. We are morally obligated to protect the public from physicians who should not be engaged in the practice of medicine and do everything we can to rehabilitate these physicians before it is too late.

We urge you to cooperate with your Board of Medical Examiners in carrying out the provisions of this important amendment.

Dr. Palmer is executive director, Florida Board of Medical Examiners.

▶ Dr. Palmer, 1204 Miccosukee Road, Tallahassee 32303.

Federal Narcotics Hospital Admission Procedures

Wilson T. Sowder, M.D.

The national policy regarding narcotic addiction holds that the condition is symptomatic of an illness that should be treated rather than being a criminal circumstance in itself. The Narcotic Addict Rehabilitation Act of 1966, therefore, provides for civil commitment to a hospital and emphasizes total treatment—hospital care, continued supervised treatment and rehabilitation. The guiding philosophy is treatment, followed by supervision and rehabilitation in the patient's own community, where the problem involving the addiction may be understood and a solution sought.

Regarding hospital care of patients, there are several provisions governing eligibility.

Of particular interest to the physician is the fact that the addict or a relative may voluntarily petition the U. S. District Attorney for hospital treatment. In Florida they are located at Tallahassee, Tampa, Miami and Jacksonville. When investigation shows reasonable evidence of addiction, the District Attorney petitions the U. S. District Court to place the addict in the custody of the Surgeon General of the U. S. Public Health Service for further examination not to exceed a period of 30 days. When addiction is confirmed and a liklihood revealed that rehabilitation through treatment is a good possibility, the court commits him to the custody of the Surgeon General for up to six months of hospital care at Lexington, Ky. After this period, the patient may remain under the care and custody of the Surgeon General for up to three years of supervised post-hospital care. In the event of refusal to comply with the program or resumption of narcotics, the patient is readmitted to the hospital.

The other provisions include a sentencing procedure to commit addicts for treatment who qualify under the law and who already have been convicted of a crime and authorization to federal courts to commit for treatment certain eligible addicts who are charged with a federal offense and who desire to be treated instead of prosecuted for the criminal charge.

There are a number of criminal offenses the prospective patient may have committed prior to seeking assistance which will cause him to be ineligible for hospital treatment. The physician having an addict in his practice who desires hospital treatment should consult with the U. S. District Attorney nearest him.

▶ Dr. Sowder, P. O. Box 210, Jacksonville 32201.

Dr. Sowder is director, Division of Health, Department of Health and Rehabilitative Services, State of Florida.

Doctor, mark these dates on your calendar:

May 6-10, 1970

96th Annual Meeting, Florida Medical Association

Diplomat Hotel, Hollywood-by-the-Sea, Florida

Deadline for scientific and educational exhibit applications will be December 1, 1969. Application form is on page 882 of this issue.

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SUMMARY OF PRESCRIBING INFORMATION

DUO-MEDIHALER®

(isoproterenol hydrochloride and phenylephrine bitartrate)

Indications: Duo-Medihaler provides relief of dyspnea resulting from bronchospasm and congestion and edema of the tracheobronchial tree. It is indicated in:

1. Acute bronchial asthma and other allergic states
2. Chronic obstructive pulmonary diseases, such as chronic bronchitis and pulmonary emphysema.

Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

Caution: Federal law prohibits dispensing without prescription.

MEDIHALER-ISO® (isoproterenol sulfate)

Indications: Dyspnea, resulting from the bronchospasm associated with:

1. Acute bronchial asthma
2. Chronic bronchial asthma
3. Chronic bronchitis
4. Emphysema

And as an adjunct in the treatment of drug sensitivity reactions, injected allergens, urticaria, and other allergic manifestations.

Contraindications: Use of isoproterenol in patients with pre-existing cardiac arrhythmias associated with tachycardia is contraindicated because the cardiac stimulant effects of the drug may aggravate such disorders.

Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

Dosage and Administration: See above.

Caution: Federal law prohibits dispensing without prescription.

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Hyoscyamine	0.03 mg.	Phenyl Salicylate	18.1 mg.
Methenamine	40.8 mg.	Benzoic Acid	4.5 mg.

PRECAUTIONS: Administer with caution to persons with known idiosyncrasy to atropine or cardiac disease. While under this therapy the urine is blue; patients should be so advised to allay apprehension.

SIDE EFFECTS: Neither irritation nor other untoward reactions have been reported; however, if pronounced dryness of the mouth, flushing, or difficulty in initiating micturition occur, decrease dosage. If rapid pulse, dizziness, or blurring of vision occur, discontinue use immediately. Acute urinary retention may be precipitated in prostatic hypertrophy.

CONTRAINDICATIONS: Glaucoma, urinary bladder neck or pyloric obstruction, duodenal obstruction and cardiospasm. Hypersensitivity to any of the ingredients.

DOSAGE: Adults—Two tablets, orally, four times per day followed by liberal fluid intake. Acute cases—Initially two tablets every hour for three doses followed by the recommended daily administration. Children—One-half the adult dose.

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Florida Medical book review

The Care of the Rheumatoid Hand by Adrian E. Flatt, MD. Pp. 234. 2nd ed. 112 illustrations. Price $14.00. St. Louis, The C. V. Mosby Company, 1968.

Adrian E. Flatt, professor of orthopedic surgery at the University of Iowa, is an internationally known surgeon of great ability who has made many contributions to surgery of the hand. This second edition of "The Care of the Rheumatoid Hand" is written in his usual frank and straightforward style, is easily followed and well illustrated.

The ten chapters include the general principles of care as well as a chapter on functional anatomy; the major portion of the book deals with rheumatoid involvement of the soft tissues and joints and its surgical treatment. The indications, limitations and results of various types of surgery are plainly given and should be of great interest to those dealing with the medical management of the disease as well as to the surgeon. The plea for early synovectomy is well brought out.

I think this book and the assimilation of its contents is a must for any surgeon who deals with the difficult problems of rheumatoid arthritis of the hand.

John Wesley Snow, M.D.
Jacksonville

Books Received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Heredity, Disease and Man: Genetics in Medicine by Alan E. H. Emery, M.D. Pp. 247. Illustrated. Price $6.95. Los Angeles, University of California Press, 1968.

Practical Automation for the Clinical Laboratory by Wilma L. White, B.A., Marilyn M. Erickson, B.S. and Sue C. Stevens, B.A., Ph.D. Pp. 401. 242 illustrations. Price $14.50. St. Louis, The C. V. Mosby Co., 1968.

The Care of the Geriatric Patient edited by E. V. Cowdry, Ph.D., Sc.D. Pp. 430. 19 illustrations. Price $15.75. St. Louis, The C. V. Mosby Co., 1968.

1968 Pediatric Therapy 1969 edited by Harry C. Shirkey, B.S., M.D., F.A.A.P. Pp. 1294. 3rd ed. 351 illustrations. Price $25.00. St. Louis, The C. V. Mosby Co., 1968.

Medical Physiology (Vol. 1) edited by Vernon B. Mountcastle, M.D. Pp. 1054. 12th ed. 880 illustrations. Price $24.00. St. Louis, The C. V. Mosby Co., 1968.

Medical Physiology (Vol. 2) edited by Vernon B. Mountcastle, M.D. Pp. 1858. 12th ed. 880 illustrations. Both vol. $24.00. St. Louis, The C. V. Mosby Co., 1968.

Internal Medicine Based on Mechanisms of Disease edited by Peter J. Talso, A.B., M.D., F.A.C.P., F.A.C.C. and Alexander P. Remenchik, B.S., M.D., F.A.C.P. Pp. 797. 164 illustrations. Price $17.50. St. Louis, The C. V. Mosby Company, 1968.

How to Live With Hypoglycemia by Charles Weller, M.D. and Brian Richard Boylan. Pp. 130. Price $4.50. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Spare-Part Surgery, The Surgical Practice of the Future by Donald Longmore, M.D., edited and illustrated by M. Ross-MacDonald. Pp. 192. Illustrated. Price $5.95. Garden City, N.Y., Doubleday & Company, Inc., 1968.

Medical Pharmacology by Andres Goth, M.D. Pp. 749. 4th ed. Illustrated. Price $13.50. St. Louis, The C. V. Mosby Company, 1968.

Synopsis of Pathology by W. A. D. Anderson, M.D. and Thomas M. Scotti, M.D. Pp. 957. 7th Ed. 408 illustrations. Price $10.50. St. Louis, The C. V. Mosby Company, 1968.

Atlas of Ear Surgery by William H. Saunders, M.D. and Michael M. Paparella, M.D. Pp. 363. 163 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

Paediatric Cardiology Edited by Hamish Watson, M.D. Pp. 996. Illustrated. Price $36.50. St. Louis, The C. V. Mosby Company, 1968.

Cancer—A Manual for Practitioners by the Massachusetts Division of the American Cancer Society. Pp. 407. 4th Ed. Price $3.00. Boston, American Cancer Society, 1968.

Surgical Pathology by Lauren V. Ackerman, M.D. and Harvey R. Butcher Jr., M.D. Pp. 1140. 4th Ed. 1,268 illustrations. Price $27.50. St. Louis, The C. V. Mosby Company, 1968.

Neuro-Ophthalmology by J. Lawton Smith, M.D. Pp. 413. 275 illustrations. Price $31.50. St. Louis, The C. V. Mosby Company, 1968.

Infection Control in the Hospital by American Hospital Association. Pp. 140. Price $3.75. Chicago, American Hospital Association, 1968.

A Manual of Simple Burial by Ernest Morgan. Pp. 64. Price $1.00. Burnsville, N.C., The Celo Press, 1968.

Drugs on the College Campus by Helen H. Nowlis, Ph.D. Pp. 144. Price $.95. New York, Doubleday & Co., Inc., 1969.

Alcohol and the Impaired Driver by the AMA Committee on Medicolegal Problems and Subcommittee on Chemical Tests for Intoxication. Pp. 234. Illustrated. Price $2.00. Chicago, American Medical Association, 1969.

Physiology of the Gastrointestinal Tract by E. Clinton Texter Jr., M.D., Ching-Chung Chou, M.D., Higino C. Laureta, M.D., and Gaston R. Vantrappen, M.D. Pp. 262. 106 illustrations. Price $10.75. St. Louis, The C. V. Mosby Company, 1968.

Appraisal of Current Concepts in Anesthesiology (Vol. 4) by John Adriani, M.D. Pp. 464. Price $12.00. St. Louis, The C. V. Mosby Company, 1968.

Water and Electrolyte Metabolism and Acid-Base Balance by Edward Muntwyler, Ph.D. Pp. 169. 33 Illustrations. Price $5.85. St. Louis, The C. V. Mosby Company, 1968.

What You Can Do About Cancer by Joseph C. Mabon, M.D. Pp. 194. Price $5.95. Illustrated. Garden City, N.Y., Doubleday & Company, Inc., 1969.

Looking For Your Celiac Child by Charlotte Baum Sheedy and Norman Keifetz. Pp. 244. Price $5.95. New York, The Dial Press, Inc., 1969.

The Evolution of Preventive Medicine in the United States Army, 1607-1939 by Stanhope Bayne-Jones, M.D. Pp. 255. Price $2.50. Washington, D.C., Superintendent of Documents, Government Printing Office, 1969.

Introduction to Medical Science by Clara Gene Young and James D. Barger, M.D. Pp. 295. Price $7.95. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Medical Interviewing by Robert E. Froelich, M.D. and F. Marian Bishop, Ph.D. Pp. 116. Price $4.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Handbook of Pediatric Cardiology by L. Jerome Krovetz, M.D., Ph.D., Ira H. Gessner, M.D. and Gerold L. Schiebler, M.D. Pp. 388. Price $16.50. Illustrated. New York, Harper & Row, Publishers, 1969.

Practical Urology by Chester C. Winter, M.D. Pp. 249. Price $11.00. 251 illustrations. St. Louis, The C. V. Mosby Company, 1969.

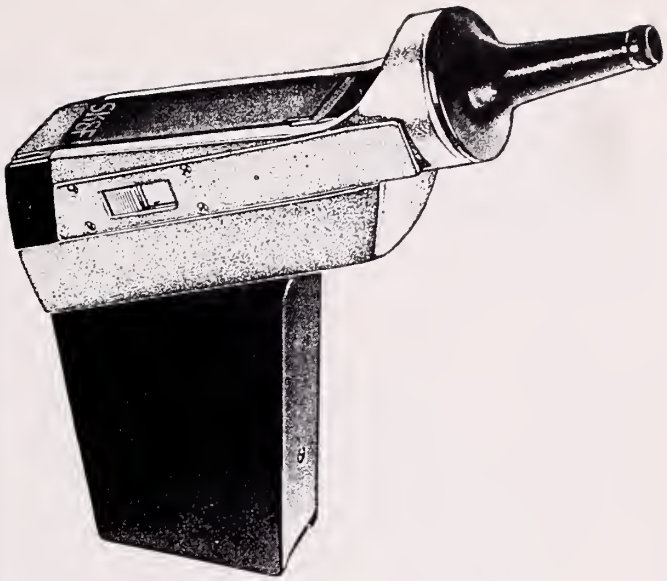
Essentials of Gastroenterology by J. Ned Smith Jr., M.D. Pp. 326. Price $14.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.



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Plans for 1970 FMA Annual Meeting Program

Gerold L. Schiebler, M.D.

The scientific program of the 1969 Florida Medical Association annual meeting underwent a total revision. The essence of this much-needed overhaul was that the FMA discontinued sponsoring a scientific program of broad general interest, separate from the state specialty group programs. In its stead, and in a greatly expanded time period, the Association invited interested specialty groups to co-sponsor new FMA scientific sections which were prepared by the specialty groups with financial assistance from the Association. These scientific sections, 12 of which were held over a two-day period, were open to all FMA members and convention registrants. Thanks to the outstanding efforts of the 14 participating specialty societies and last year's Committee on Scientific Assemblies, under the chairmanship of Dr. Edwin T. Long, formerly of Lakeland, who has recently departed Florida and moved to Pennsylvania, the 1969 revision was considered a highly worthwhile step.

It is the hope and plan of the Committee on Scientific Assemblies to continue the same general approach and format for the 1970 annual meeting, being held May 6-10 at the Diplomat Hotel, Hollywood. The recognized state specialty societies have been invited to apply by December 1, 1969, for co-sponsorship of scientific sections. The number of such sections will be dependent upon responses from the societies. In addition, plans are moving forward for special section programs on trends in the areas of medical education, mental retardation and aging. Following a meeting of the Committee on Scientific Assemblies in December to evaluate specialty group wishes, the sectional programs will be better clarified.

Applications for presentation of scientific exhibits are being received up to a deadline of December 1. For the coming year, the committee recognized the need for establishing a third category of exhibit, "educational," to be distinct from "scientific" and "technical" exhibits. Though the same application form is being utilized for both scientific and educational exhibits, the two categories will be judged and located separately. Technical exhibits, of course, are those for which rental is paid by pharmaceutical and equipment manufacturers. The reason for the additional category was a growing number of applications from FMA committees, specialty groups, state and federal agencies and other organizations for exhibits not purely scientific but broadly educational in nature.

The hopeful result of all these changes, of course, is an improved and more varied scientific continuing education program for all Florida physicians. There is no reason why the FMA annual meeting cannot be an outstanding scientific program each year—one truly reflective of Florida medicine at its finest. The Committee on Scientific Assemblies calls upon every physician, regardless of specialty interest or affiliation, to aid towards achieving that end.

▶ Dr. Schiebler, University of Florida College of Medicine, Gainesville 32601.

Dr. Schiebler, professor and chairman, Department of Pediatrics, University of Florida College of Medicine, Gainesville, is chairman, Committee on Scientific Assemblies, Florida Medical Association.

Doctor Needs in Florida

A Report from the FMA Physician Placement Service

Eugene L. Nixon

One of the least known but most appreciated services of the Florida Medical Association is its Physician Placement Service. Administered as a function of the Scientific and Medical Services Department of the FMA headquarters office, the Placement Service daily assists physicians throughout the nation and world in finding Florida practice locations. It also helps FMA members and Florida communities, hospitals, government agencies and industries to obtain needed doctors. There is no charge for any of the services, which are available to anyone upon request.

As of October 1, 225 opportunities for medical practice in Florida were registered with the Placement Service. At the same time, there were 189 physicians actively seeking locations in the state.

According to Placement Service registrations, the most widespread current medical needs in Florida appear to be in general or family practice, internal medicine, pediatrics and in the rapidly growing new specialty of emergency room practice. A former acute need for otolaryngologists appears to be leveling off, as does the need for psychiatrists which apparently reached a peak with the establishment of numerous community mental health centers several years ago.

Although the state seems well supplied in most surgical specialties, the number of openings in general surgery has been on the increase. Judging from the Placement Service experience, the most oversupplied specialty appears to be orthopedics. This may be illustrated by current registrations which show 11 orthopedists seeking locations and only two opportunities. The need for general practitioners and most specialists is fairly evenly distributed over the state, but the need for internists shows an especially heavy concentration in the southeast "Gold Coast" area.

Of the physicians seeking Florida locations, about one fifth are already in the state. The remaining majority is scattered throughout nearly all of the 50 states and in a number of foreign countries. Leading states in number of doctors registered are New York, Pennsylvania, California and Virginia, in that order. There appears no ready explanation as to why Virginia ranks so high among vastly more populous states.

Doctors with knowledge of medical opportunities or wishing to change their own practice locations are invited to make the information known to the Physician Placement Service at P. O. Box 2411, Jacksonville 32203, telephone (904) 356-1571. A table follows showing registration by specialty with the Placement Service as of October 1, 1969.

Specialty	Opportunities	Physicians Seeking Locations
Allergy	2	1
Anesthesiology	1	0
Dermatology	4	4
Emergency Room	11	1
General/Family Practice	79	40
General Surgery	12	24
Internal Medicine		
General	49	25
Cardiology	7	3
Gastroenterology	2	1
Hematology	0	2
Pulmonary Disease	1	2
Neurology	1	1
Neurosurgery	1	1
Obstetrics/Gynecology	5	6
Occupational Medicine	3	2
Ophthalmology	5	10
Orthopedic Surgery	2	11
Pathology	1	5
Pediatrics	14	4
Physical Medicine/Rehabilitation	0	1
Plastic Surgery	2	0
Proctology	1	0
Psychiatry	1	5
Public Health	0	1
Radiology	4	12
Thoracic Surgery	3	3
Urology	5	12
Miscellaneous	5	4
Totals	225	189

Mr. Nixon is director, Scientific and Medical Services Department, Florida Medical Association, Jacksonville.

▶ Mr. Nixon, P. O. Box 2411, Jacksonville 32203.

The Role of the Florida Regional Medical Program in Medical Education

Granville W. Larimore, M.D.

The Florida Regional Medical Program is a relatively new organization. Its grantee institution is the Florida Advisory Council on Heart Disease, Cancer and Stroke, Inc., which is tied in closely with organized medicine. The president of the nonprofit corporation and state chairman of the program is H. Phillip Hampton, M.D., of Tampa. Article one of the by-laws of the corporation provides that of the 14 members specified, four shall be representatives designated by the Florida Medical Association. Besides Dr. Hampton, these representatives are Clyde M. Collins, M.D., of Jacksonville, Richard M. Fleming, M.D., of Miami Beach, and Carl E. Andrews, M.D. of West Palm Beach.

Besides Drs. Hampton, Andrews, Collins and Fleming, there are other physician members who serve on the board of directors; included is Louis C. Murray, M.D., of Orlando, who represents the Florida Board of Regents. Also serving on the board and closely involved with the fiscal operations of the program is Mr. W. Harold Parham, executive vice president of the FMA.

The Regional Medical Program is further tied in with the medical profession of the state through the Florida Medical Foundation, which acts as fiscal agent for the program. The Foundation has played a vital role in the establishment of the Florida Regional Medical Program through its commitment to underwrite such audit exceptions as the federal government may make in connection with funds expended.

In fact, it would not only be fair, but also most accurate to state that the Florida Regional Medical Program owes its very existence to the physicians of the state and to the leadership shown by the Florida Medical Association and the Foundation and particularly to the leadership role of Dr. Hampton, who occupied the key spot of president of the Florida Medical Association at the time Public Law 89-239 was enacted and who really got the Florida Regional Medical Program under way.

The Florida RMP is the newest of the 55 Regional Medical Programs in the nation. It is not the intent to build a large central staff, but rather to develop a small capable group who can effectively serve the needs of the state. All are most anxious to see that whatever money comes to Florida under the Regional Medical Program is channeled to vital grass roots activities and not soaked up by a large central office staff.

Education is one of the basic tenets of the Regional Medical Program. Section 900 of Public Law 89-239, which established the program, in outlining the purposes of the Act states in its very first sentence:

> "Through grants, to encourage and assist in the establishment of regional cooperative arrangements among medical schools, research institutions and hospitals for research, and training, *including continuing education*, and for related demonstrations of patient care in the fields of heart disease, cancer, stroke, and related diseases."

The articles of incorporation of the Florida Advisory Council, the grantee institution for the Florida Regional Medical Program, also stress the importance of education in accomplishing the goals of the program.

In carrying out the Florida Regional Medical Program's responsibilities in the field of continuing education, it is our intent to:

Be Meaningful

It is obvious that with resources that are always limited in the face of needs that are always great, the education efforts of the Regional Medical Program must, if they are to be meaningful, be pragmatic in their direction. In short, we must put the *education where the need is.*

Education, we would suggest, needs to be directed toward the acquisition and use of *new* skills and techniques on the part of the physicians. It also needs to be directed toward the skillful use of those facilities and techniques that have been around for some time, such as the Papanicolaou smear and perhaps the best example of all, the index finger of the physician.

Be Local

We must be "local" in our educational efforts; that is, we must put the education where the physician is. This means developing ways to deliver

(Continued)

Dr. Larimore is state director, Florida Regional Medical Program, Tampa.



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Precautions: Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
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information to the physician at readily accessible sites. There are many such sites, including county, state, and national medical meetings, university centers, community hospitals, even the physician's office, his home and his automobile. Of these, the site that merits particular attention is the community hospital. The community hospital has been characterized as the backbone, the workhorse of the Regional Medical Program, the spot where the action is. It is our intention to explore fully, not to the exclusion of all else, of course, the possibilities of the community hospital as a focal point for continuing education. While this does present some problems, the community hospital has much to commend it as an educational focus, a fact that has already been recognized by both physicians and hospitals as is evidenced by the appearance on the scene in recent years of the "directors of medical education" who have served with great effectiveness in increasing numbers of hospitals in the state.

Be Innovative

We must be innovative. While the traditional didactic lecture in a classroom setting may still have a place in medical education, it has been my observation that both its role and effectiveness in continuing education are minimal.

With the time of physicians for continuing education being a major limiting factor and with financial resources as always inadequate to meet all of the needs, we must seek out and develop new ways of delivering information to physicians, and to provide new methods of continuing education that are effective as well as economical of both time and money.

We must and we will in the Florida Regional Medical Program seek ways of adapting for continuing medical education the many new techniques and devices that have come upon the communications scene in recent years. One thing is obvious and must be borne in mind; that is, there is no one device or no one technique that will fit all situations or meet all the needs of continuing education.

Finally, all in the Florida Regional Medical Program are most anxious to work with all of the appropriate councils and committees of the Florida Medical Association, with the medical educational institutions of the state, and with all other interested agencies in developing an innovative and effective program of continuing education for all of the physicians of Florida in the areas of heart disease. cancer and stroke.

▶ Dr. Larimore, One Davis Boulevard, Tampa 33606.



Florida Medical | deaths

Bailey, Charles Denny, Orlando; born 1915; University of Georgia School of Medicine, 1949; member AMA; died Jan. 27, 1969, aged 54.

Biber, David, Gainesville; born 1907; Eclectic Medical College, 1939; member AMA; died July 20, 1969, aged 62.

Bindshedler, Buell, Ft. Lauderdale; born 1913; Wayne University Medical School, 1939; member AMA; died Jan. 1, 1969, aged 56.

Bowman, Robert Neale, Miami Beach; born 1895; University of Pittsburgh, 1920; died Mar. 31, 1969, aged 74.

Breakstone, Judd R., Miami Beach; born 1907; Chicago Medical School, 1939; member AMA; died May 30, 1969, aged 62.

Butt, Cecil G., Orlando; born 1921; Emory University, 1948; member AMA; died July 22, 1969, aged 48.

Butter, John R., St. Petersburg; born 1917, University of Minnesota, 1941; member AMA; died Sept. 5, 1969, aged 52.

Click, Gustav N., Pensacola; born 1907; Tulane University, 1934; member AMA; died May 7, 1969, aged 62.

Dawson, George Millard, North Palm Beach; born 1892, Columbia University, 1918; member AMA; died July 9, 1969, aged 77.

Edwards, Ray O. Jr., Jacksonville; born 1924; Tulane University, 1947; member AMA; died Aug. 24, 1969, aged 45.

Green, Oveida F., Mayo; born 1882; University of Georgia Medical College, 1905; member AMA; died Apr. 12, 1969, aged 87.

Hendrix, Claude Addison Jr., Pompano Beach; born 1922; University of Louisville, 1947; member AMA; died Apr. 26, 1969, aged 47.

Herz, Ralph, Key West, born 1889; Western Reserve University, 1917; member AMA, died Feb. 18, 1969, aged 80.

Hollender, Abraham R., Miami Beach; born 1892; University of Illinois, 1915; member of AMA; died May 5, 1969, aged 77.

Horton, James A., Okeechobee; born 1927; Louisiana State University, 1954; member AMA; died Mar. 22, 1969, aged 42.

Huntley, Earl S. Jr., Miami; born 1920; University of Maryland, 1953; member AMA; died May 24, 1969, aged 49.

Kearn, Joseph David, Miami Beach; born 1916; University of Edinburgh, 1939, member AMA; died July 16, 1969, aged 53.

Kicklighter, James Ellis, Sarasota, born 1924; Duke University, 1947; member AMA; died June 19, 1969, aged 45.

Lauth, John Edward Jr., Miami; born 1922; University of Pittsburgh, 1947; member AMA; died Feb. 11, 1969, aged 47.

Mabry, Charles B., Jacksonville; born 1894; University of Louisville, 1921; member AMA; died Aug. 7, 1969, aged 75.

McCormick, John T., Jacksonville; born 1928; Medical College of Georgia, 1953; member AMA; died Apr. 8, 1969, aged 41.

Morrison, Charles W., Key West; born 1894; Medical College of South Carolina, 1919; died May 27, 1969, aged 75.

Navarro, Jose I., Homestead; born 1882; University of Havana, 1907; member AMA; died June 6, 1969, aged 87.

Sapp, James W., Havana; born 1906; Emory University, 1934; member AMA; died Jan. 12, 1969, aged 63.

Solomon, Henry D. Sr., St. Petersburg, born 1897; Jefferson Medical School, 1922, member AMA, died May 19, 1969, aged 72.

Sternberg, Jacob C., Miami; born 1896; Bellevue Medical School, 1924; member AMA; died August 1969, aged 73.

Stewart, Paul B., Naples; born 1886; University of Buffalo, 1911; member AMA; died Apr. 12, 1969, aged 83.

Tallman, Maurice H., Miami; born 1886; University of Iowa, 1910; member AMA, died Aug. 1, 1969, aged 83.

Toporoff, Jacob, West Palm Beach; born 1891; New York University, 1916; died Apr. 24, 1969, aged 78.

Van Schaick, Harold D., Jacksonville; born 1889; Tulane University, 1913; member AMA; died June 24, 1969, aged 80.

Wakefield, Harry A., Palm Beach; born 1887; North Carolina Medical College, 1908; died June 15, 1969, aged 82.

Weiffenbach, Eugene J., Key West; born 1934; Tulane University, 1959; member, AMA; died June 25, 1969, aged 35.

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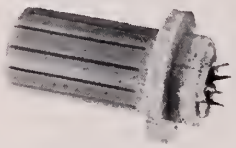
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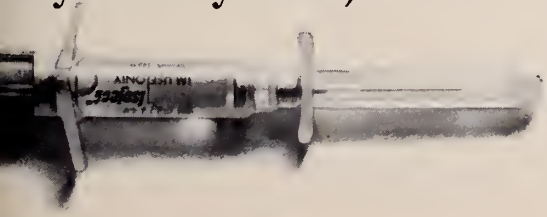
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Serum levels obtained by the recommended dosages are comparable to those provided by the oral dosage of 1 to 2 Gm. daily in adults. Antibiotic therapy should be continued for at least 24 to 48 hours after all symptoms and fever have subsided.

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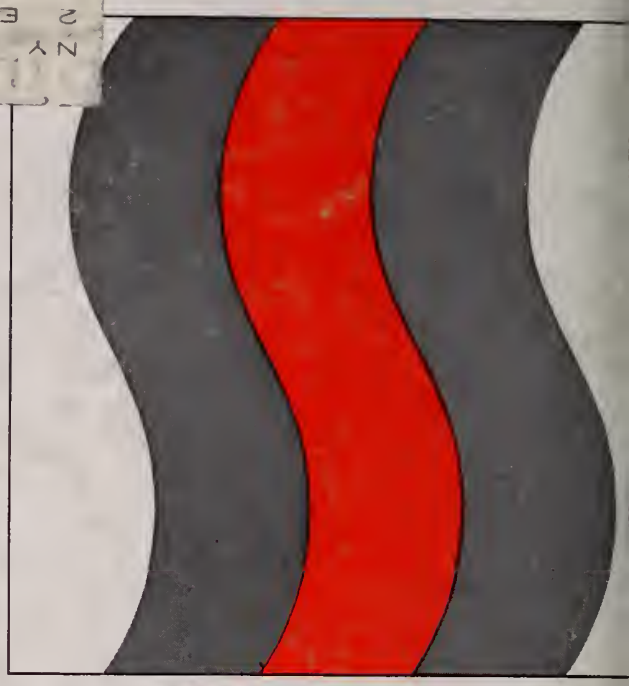
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Precautions: In the elderly and debilitated, and in children over six, limit t smallest effective dasage (initiolly 10 mg or less per doy) ta preclude atax or oversedatian, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, i combinatian therapy with ather psychotropics seems indicated, carefully consider individual pharmacalogic effects, porticulorly in use of potentiati drugs such as MAO inhibitors and phenothiazines. Observe usual precautians in presence of impaired renol or hepotic functian. Parodoxicol reactians (e.g., excitement, stimulation ond acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Empl usuol precautions in treatment of onxiety stotes with evidence af impending depressian; suicidal tendencies may be present and protective measure necessory. Variable effects an blaad coagulation have been reparted very rarely in patients receiving the drug ond aral onticaagulants; causal relatianship has nat been established clinically.

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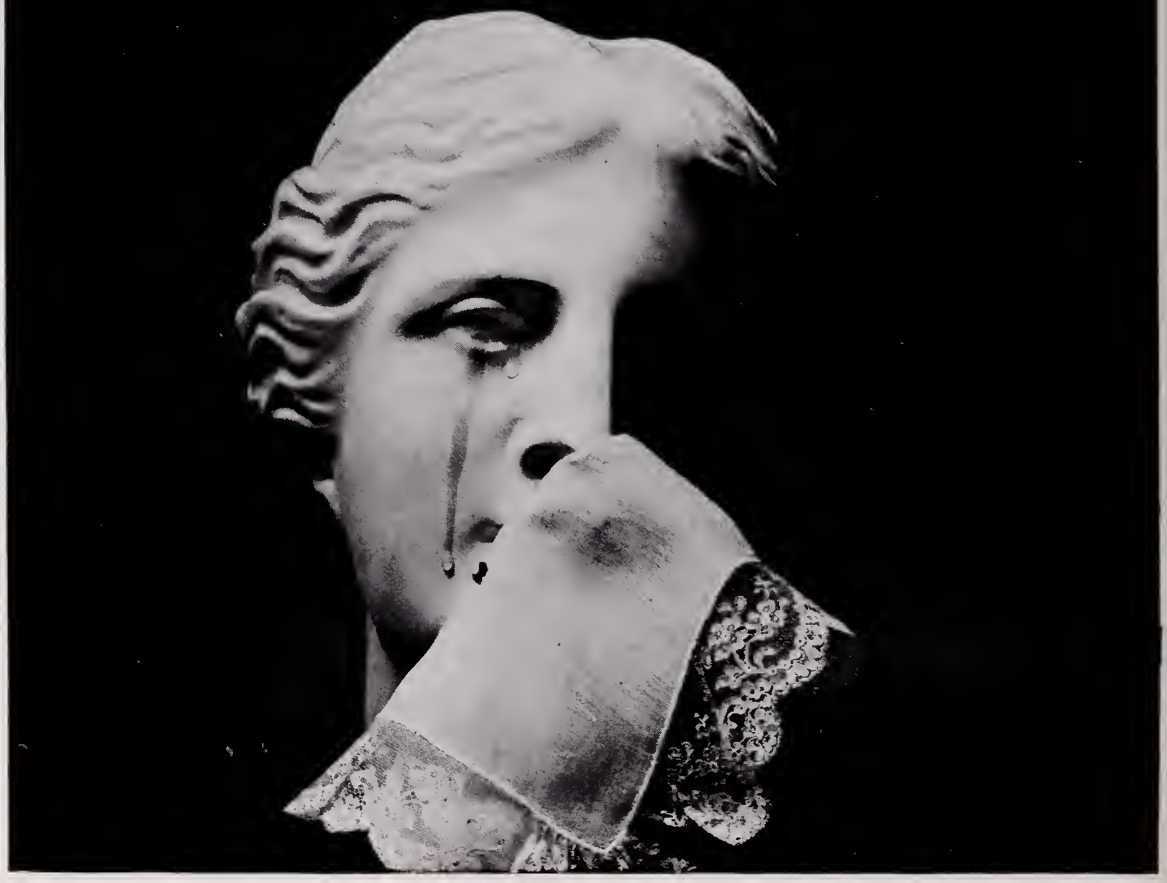
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Precautions: Overgrowth of nonsusceptible organisms may occur. stant observation is essential. If new infections appear, appro measures should be taken. In infants, increased intracranial pr with bulging fontanels has been observed. All signs and symptom disappeared rapidly upon cessation of treatment.

Side Effects: Gastrointestinal system—anorexia, nausea, vomiting, rhea, stomatitis, glossitis, enterocolitis, pruritus ani. Skin—macul ular and erythematous rashes; a rare case of exfoliative dermatit been reported. Photosensitivity; onycholysis and discoloration nails (rare). Kidney—rise in BUN, apparently dose related. Tra increase in urinary output, sometimes accompanied by thirst Hypersensitivity reactions—urticaria, angioneurotic edema, anaphy Teeth—dental staining (yellow-brown) in children of mothers give drug during the latter half of pregnancy, and in children given the during the neonatal period, infancy and early childhood. Enamel plasia has been seen in a few children. If adverse reaction or id crasy occurs, discontinue medication and institute appropriate th Demethylchlortetracycline may form a stable calcium complex i bone-forming tissue with no serious harmful effects reported th in humans.

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It Is Never Too Late

There are many unsettling events going on these days. It seems that few trust the motives or actions of anyone else. The revolution of youth is with us. Most people, young and old alike, are bewildered. Our basic beliefs and our abilities to define responsible behavior are shaken.

To my mind there is something new and fresh abroad—a trend which is wonderful in its potential. First, look at New York City. It has become a "lost city"—cold, cruel, dangerous to life, limb and morals. Its great numbers of people are mixed up in a caldron so seething with hate and suspicion as to defy description. Yet look what has happened! The New York Jets, a football team rated very poorly in 1968, won the Super Bowl game in January 1969. The New York Mets, a baseball team, came from nowhere in 1969 to win the baseball championship against great odds. It seems a deep ground swell of strength rose, probably generated from the people themselves. The basic American strength of character renewed itself to counteract the terrible fate of the city. This visible sign of hope did not come overnight and it was not due to any one man. It came as a common act of faith and teamwork of men working together toward a common goal which was bigger than they themselves. This is what Eric Hoffer keeps saying.

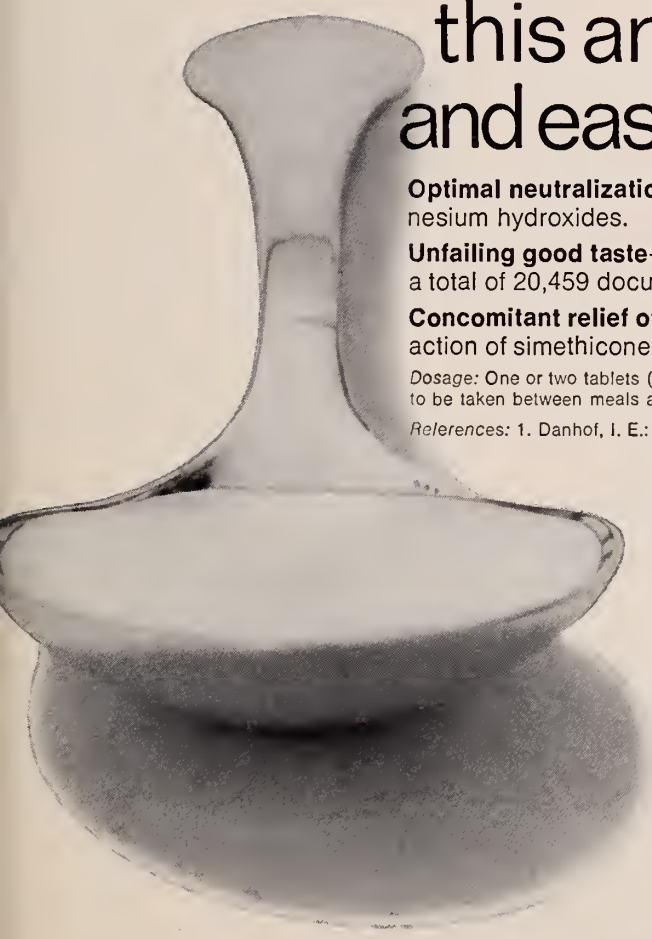
Look in our own state of Florida. A few years ago, Steve Spurrier and his teammates had this spirit. The present University of Florida football team has the same wonderful attitude—win or lose but usually win. This is the result of faith of men in each other. Isn't it wonderful! Somehow the Biblical tenet is once again emphasized: it is never too late to make a fresh start if you are willing to work and have faith. Nothing can overcome a strong spirit. The fact that the Jets, the Mets, and our Florida teams are at or near the top is not the point. The teammates work together even when they meet defeat. *And they come back!* I'm sure of it. This spirit is so important that it has almost the quality of a religious attitude. Who in the world would ever believe that Joe Namath, or a football team or a baseball team, would qualify as spiritual leaders? *But they do!* And may God bless them for what they have done for this country. I, for one, owe them all a debt of gratitude and can better dedicate myself to the principles for which *my* teammates and I stand. With such an attitude it is impossible to fail; we really cannot be licked. The smallest man (or woman) still has a chance if he is willing to work as part of a team *without* selfishness and *with* self-discipline.

Let us relate this spirit to our many problems in medicine. Merry Christmas!

Henry J. Baberough Jr.

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References: 1. Danhof, I. E.: Report on file. 2. Hoon, J. R.: Arch. Surg. 93:467 (Sept.) 1966.

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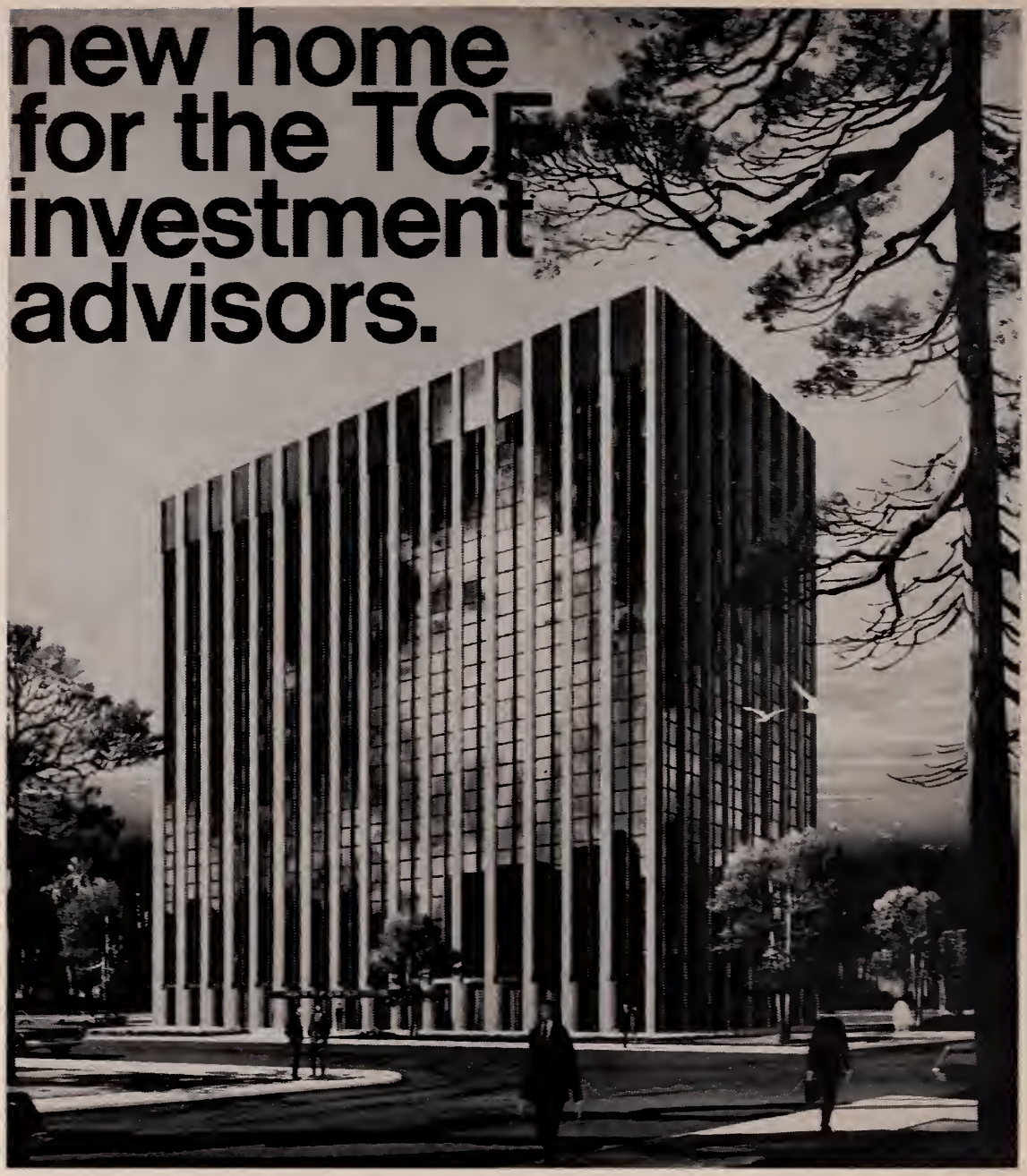
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Photographs should be submitted as 5x7 glossy prints, untrimmed and unmounted; number each photograph *lightly* on the back with pencil and indicate top.

Line art such as charts, graphs and medical illustrations should be submitted as india ink drawings on white gloss paper; remember to make details large enough to allow for photographic reduction.

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References should conform to the style of the Index Medicus: name of author, title of article, name of publication with volume, page numbers, month and year. Example: McCollough, N. C.: Emergency Room Treatment of Venomous Snakebite, J. Florida M. A. 55:317-318 (April) 1968. References should be typewritten, double or triple spaced, beginning on a new sheet of paper entitled "References." Number references in the text in order of citation and prepare bibliography in the same order. Use superscript arabic numerals to cite references. Authors are responsible for the accuracy of bibliographies. The Journal Publications Committee reserves the right to pass upon the publication of any bibliography. Unusually lengthy bibliographies may be referred to at the end of the text with the statement "References are available from the author upon request."

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H-ROBINS

Florida Medical books received

Receipt of the following books is acknowledged. While time and space will not permit review of all books received, medical readers interested in reviewing particular books are invited to address requests to the Editor. Following acceptance of a written review for publication, a reviewer may then retain the book reviewed for his personal or favorite library.—Ed.

Plastic and Maxillofacial Trauma Symposium. Nicholas G. Georgiade, editor. Pp. 221. Price $25.00. 390 illustrations. St. Louis, The C. V. Mosby Company, 1969.

A Synopsis of Contemporary Psychiatry by George A. Ulett, M.D. and D. Wells Goodrich, M.D. Pp. 340. Price $9.50. St. Louis, The C. V. Mosby Company, 1969.

Benign Diseases of the Vulva and Vagina by Herman L. Gardner, M.D. and Raymond H. Kaufman, M.D. Pp. 359. 406 illustrations. Price $23.50. St. Louis, The C. V. Mosby Company, 1969.

Genetics and Counseling in Medical Practice by Leonard E. Reisman, M.D. and Adam P. Matheny Jr., Ph.D. Pp. 215. Price $12.75. Illustrated. St. Louis, The C. V. Mosby Company, 1969.

Infectious Diseases and General Medicine, Vol. III. Prepared and published under the direction of Lieut. General Leonard D. Heaton, The Surgeon General, United States Army. Pp. 712. 123 illustrations. Price $8.25. Washington, D.C., Government Printing Office, 1969.

Prematurity and the Obstetrician by Denis Cavanagh, M.D. and M. R. Talisman, M.D. Pp. 542. Price $16.50. Illustrated. New York, Appleton-Century-Crofts, Division of Meredith Publishing Company, 1969.

Physical Diagnosis by John A. Prior, M.D. and Jack S. Silberstein, M.D. Pp. 436. Price $10.50. 454 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Therapeutic Radiology by William T. Moss, M.D. and William N. Brand, M.D. Pp. 564. Price $22.50. 303 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Organization and Administration of Health Care by Richard L. Durbin, A.B., M.B.A., M.P.A., and W. Herbert Springall, A.B., M.P.H. Pp. 258. Price $9.85 51 illustrations. St. Louis, The C. V. Mosby Company, 1969.

Symposium on the Spine by American Academy of Orthopaedic Surgeons. Pp. 289. Price $19.50. 558 Illustrations. St. Louis, The C. V. Mosby Company, 1969.

Surgeon's Choice by Frank G. Slaughter, M.D. Pp. 345. Price $5.95. New York, Doubleday & Company, Inc., 1969.

Morris Fishbein, M.D., An Autobiography, by Morris Fishbein, M.D., Pp. 505. Price $10.00. 24 Illustrations. New York, Doubleday & Company, Inc., 1969.

Symposium on Retina and Retinal Surgery— Transactions of the New Orleans Academy of Ophthalmology. Pp. 406. 372 illustrations. Price $29.50. St. Louis, The C. V. Mosby Company, 1969.

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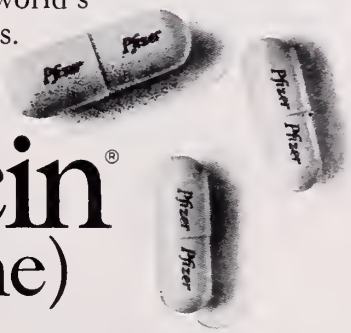
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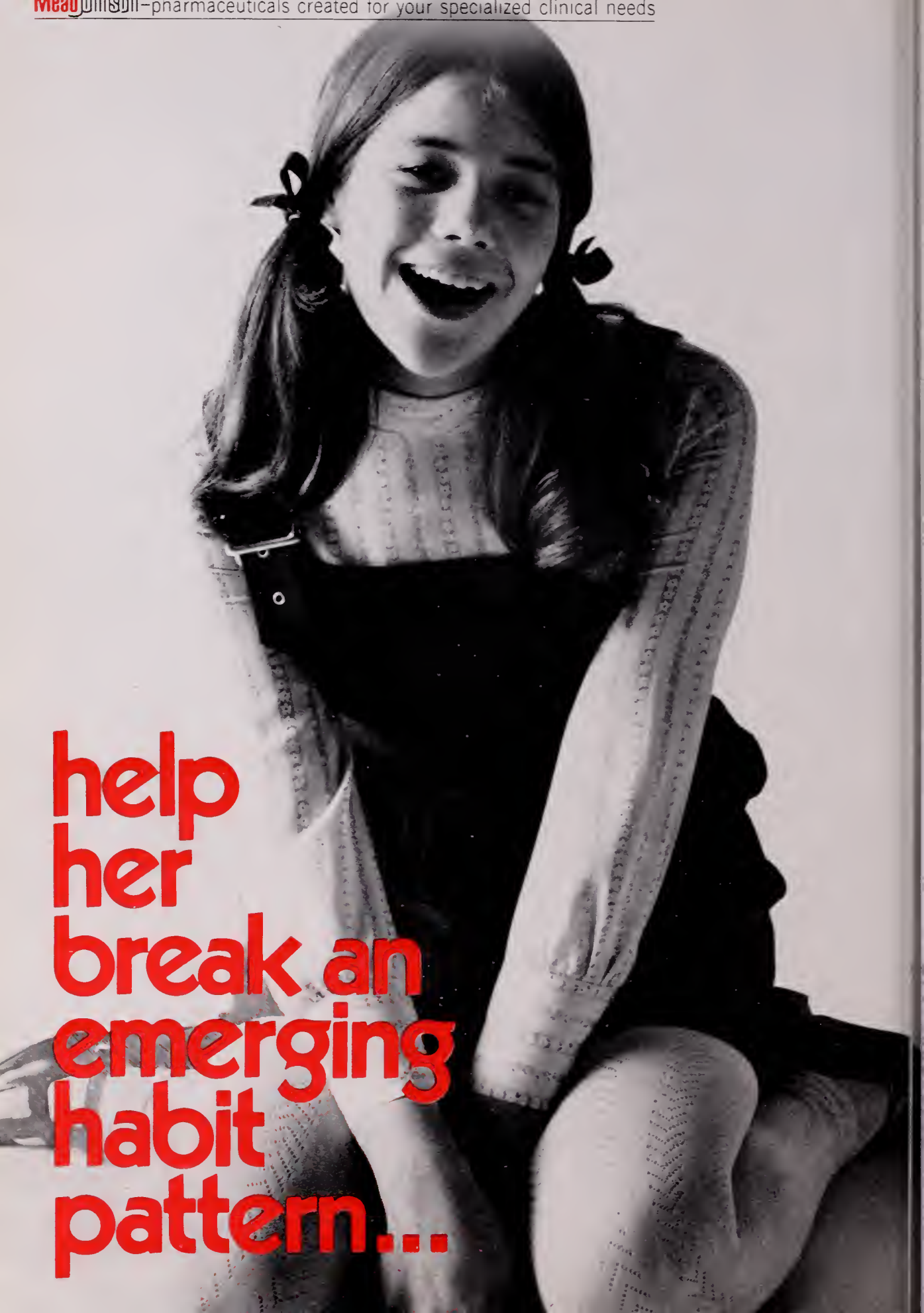
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ones, Georgeanna S.: Maryland Med. J. 16:45, 1967.

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REFERENCES: (1) Sands, R.X.: New York St. J. Med. 61:2598-2602, 1961; (2) Renner, M.J., et al.: Hosp. Topics 39:71-73, 1961; (3) Haas, Jr., J., and Kay, L. L.: Southwest Med. 42:30-32,1961; (4) Marshall, W.: Clin. Med. 7:499-502, 1960; (5) Strauss B.: Clin. Med. 4:307-310, 1957.

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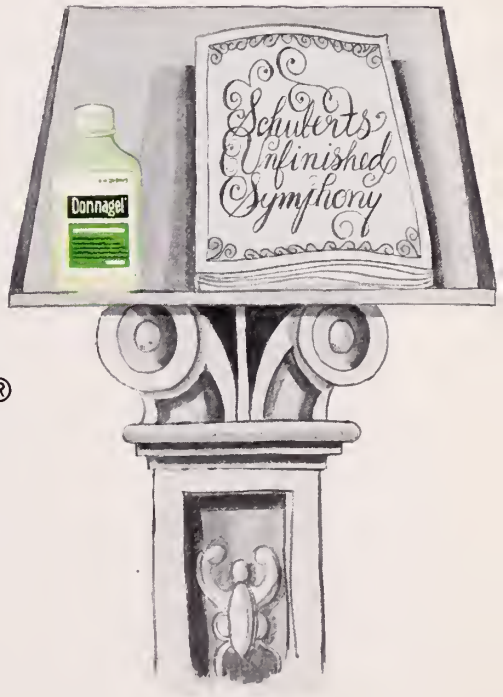
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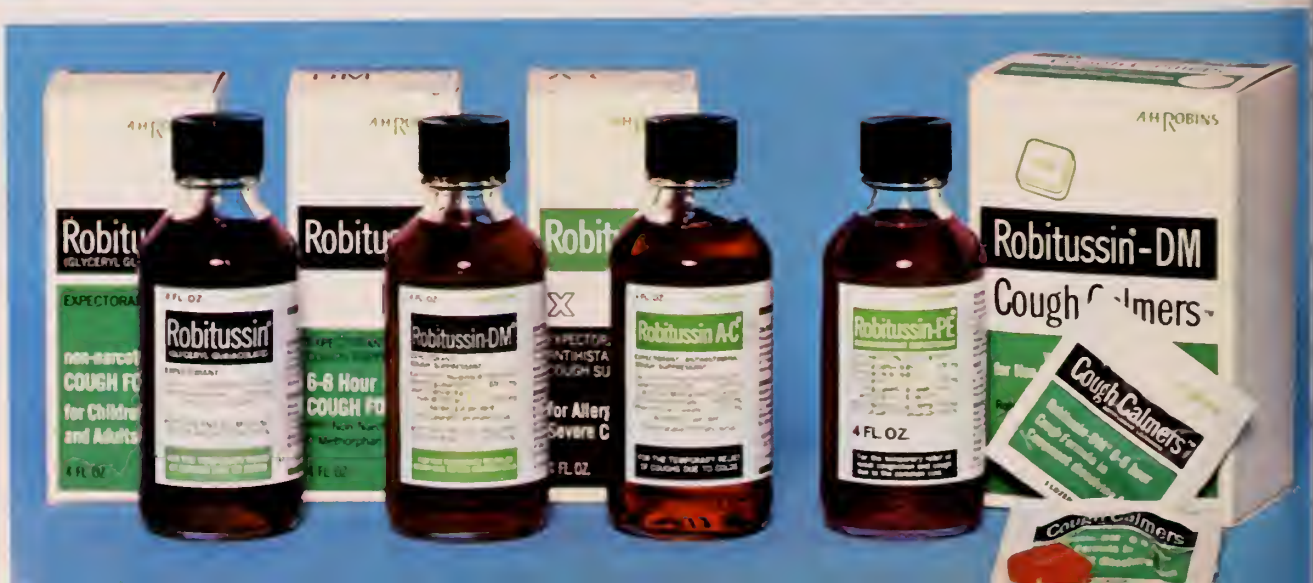
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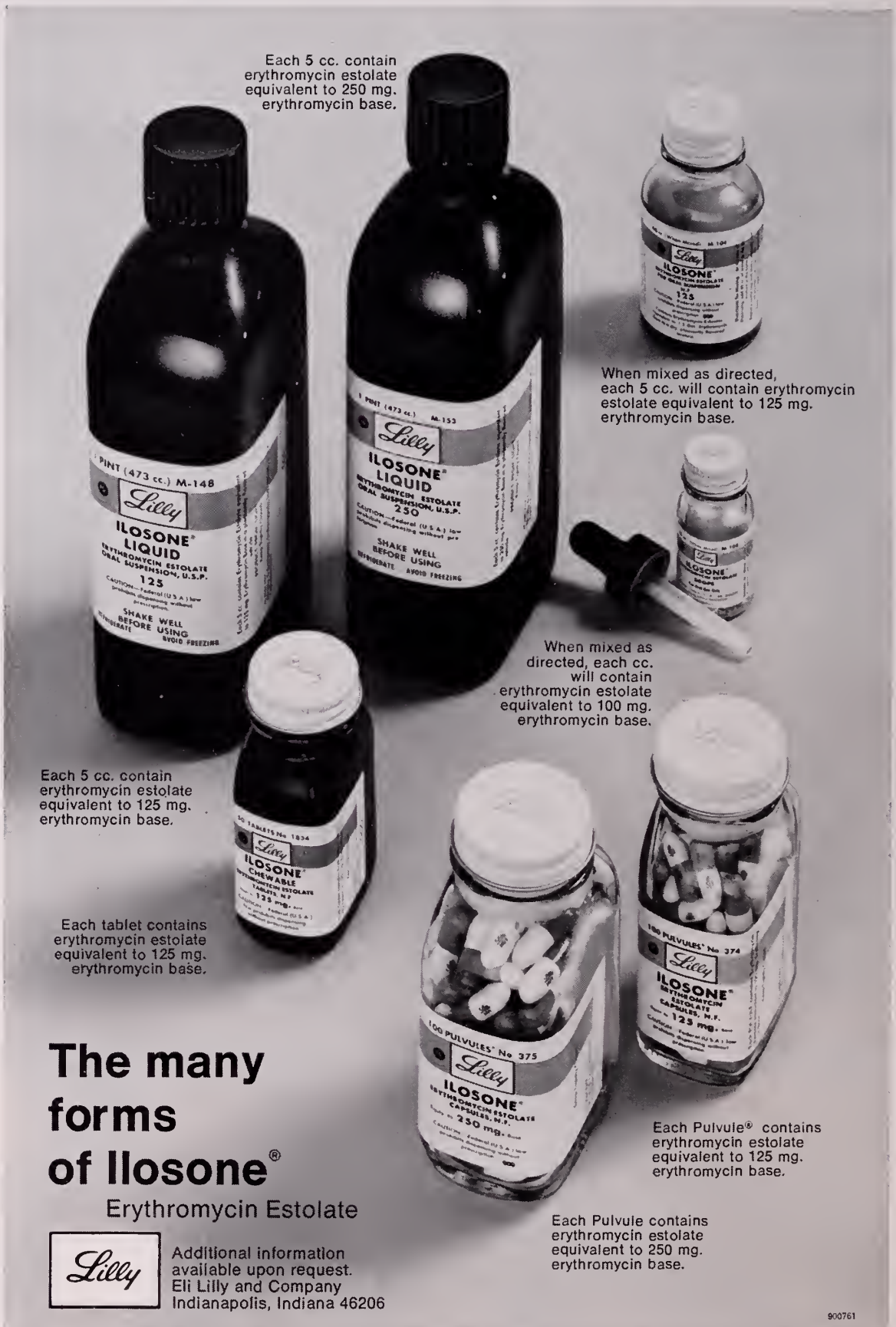
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Carcinoma-in-Situ of the Breast

J. F. Kuzma, M.D.

"Relative disinterest in the diagnosis of carcinoma-in-situ in the breast, and lack of clinical and basic studies, can be attributed to our inability to identify the disease by a reasonable clinical method, and to the currently unacceptable therapeutic implications of the diagnosis." This statement by Stein[1] is a summary expression of the recent past. If we now cross to the immediate future, the question becomes one of a sound and acceptable method to discover and satisfactorily treat the more than 300,000 potential breast cancer victims in the next five years. These are to be identified in a population of some 36,000,000 women more than 40 years of age, further bearing in mind that breast cancer incidence is increasing in women less than 55 years of age.

The curability of breast cancer, although dependent upon many factors, seems to reside chiefly in the premise that dissemination of the disease is a function of the duration and size of the primary lesion, that is, the stage of the disease at the time of discovery or first treatment.

The challenge, then, becomes one of finding incipient cancer of the breast, a cancer which is in a preclinical, presymptomatic, prediagnosable(?) phase for three fourths of its duration?

Detection Procedures

Periodic clinical examination and mammography are complementary procedures which, in combination, are recognized as the most effective present-day approach to the diagnosis of the earliest breast cancers. One such combined examination per year for three years will pick up twice as many early cancers, without positive nodes, than will be discovered in a control group.[2] For those with cancer, a generous contralateral breast biopsy is highly desirable, if in fact not imperative.

The central purpose of all detection procedures is to isolate geographic variations or abnormalities —mass, thickening, induration, density, viability, and calcification—so that histologic assessment, the sine qua non of diagnosis, may be made. The pathologist then becomes the key figure, though he has often failed to appreciate the significance of intraductal epithelial hyperplasia, especially terminal duct filling, with lobular expansion and distention, which we now recognize as lobular carcinoma-in-situ. More adequate sampling and application of x-rays to removed surgical specimens for the purpose of localizing the site for histologic investigation are simple highly recommended procedures available to everyone. The findings of distended hypercellular ductules, epithelial bridging, and cribriform expansion of ducts, even without significant cytological atypicalities, are patterns of justifiable concern to the pathologist, for in fact they generally are the curable preinvasive patterns of ultimately aggressive disease. Papillary ductular hyperplasias, though more difficult to assess, may yet be better understood if criteria of a very thin inconspicuous vascular supporting tissue and nuclear atypicalities are noted and associated with invasive potential. Large duct hyperplasias and thickenings, as noted clinically and by mammography, statistically tend to keep company

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Presented at Section on Surgery, 95th Annual Meeting, Florida Medical Association, May 17, 1969, Bal Harbour.

with progressive and aggressive changes, and should also be noted. The referred to changes are objectively significant but assume even more immediate importance in women at high risk, such as those who have had one mammary cancer or one or more other factors such as familial history of breast cancer, early menarche, never married, or infertile.[3]

Conclusion

In the context of the above, progress in the control of breast cancer shall remain dependent upon:

More frequent mammographic and clinical examination.

More frequent and wider excisions of local lesions, even when minimal, in patients with previous breast carcinoma or familial history of breast cancer. This includes contralateral breast biopsy in the women who are under care for breast cancer.

Better assessment of histologic abnormalities, terminal duct filling, epithelial bridging and cribriform expansions of ducts, and papillary ductular hyperplasias with nuclear atypicalities.

Better acceptance of the significance of lobular carcinoma-in-situ, even if only one lobule is involved. The disease is curable by mastectomy at this stage, but risk for infiltrative disease is 1% per year.

Until a worthwhile predictive or diagnostic test short of repeated biopsy is available, a simple mastectomy offers the soundest approach for in situ lesions and for epithelial atypicalities in high risk females.

A question remains—Is the price for prevention of lethal breast cancer too high?

References

1. Stein, A.: In Pathology Annual, Sheldon C. Sommers, ed., New York, Appleton-Century-Crofts. 1967.
2. Hayward, J. L.: Presymptomatic Diagnosis of Breast Cancer, Proc. Royal Soc. Med. 59:1204. 1966.
3. Various authors, Cancer, 23:4 (April) 1969.

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Is The Halsted Radical Mastectomy Any Longer Indicated?

Richard M. Fleming, M.D.

When Halsted[1] and Willy Meyer[2] developed the radical mastectomy before the turn of the century, carcinoma of the breast was being encountered at a more advanced stage than today. "I operate not infrequently," said Halsted, "on cases in which the disease has involved the fat and the tissue between the muscles of one or both pectoral muscles."[1] Certainly today the type of cases referred to here would not be considered amenable to radical surgery, at least not without the benefit of preoperative radiation.

In the 75 years since the radical mastectomy was introduced we have learned much about the behavior of cancer of the breast. New adjuncts to earlier diagnosis and supplementary forms of treatment have been developed. We have been slow, however, to critically re-evaluate the rationale of the various steps in a standard Halsted radical mastectomy and adjust our operative approach so that it is consistent with this newer knowledge.

The amount of skin that should be excised with a carcinoma of the breast has been the object of a number of studies. Recently Spratt and Donegan[3] have reported on the results of their study of 559 cases of breast cancer at the Ellis Fischel State Cancer Hospital of Missouri, where the measurements of the skin excised with the specimen were accurately recorded. They found that when the amount of skin excised had a margin of at least 3 cm. from the tumor in all directions, local recurrence rate remained the same when compared to those cases having wider margins of skin excised. This confirms the clinical impression which I have had for some time.

The practice of making thin skin flaps in radical mastectomy is based on the idea that not only every vestige of breast tissue but the subdermal lymphatics for some distance surrounding the breast should be removed. Certainly if we suspect cancer cells in the subdermal lymphatics 5 to 10 cm. from the tumor margin, one should not operate on that particular breast. Hugh Auchincloss Jr.[4] has studied the local recurrence rate in radical mastectomy cases where extremely thin dermal skin flaps were employed and compared them to those cases where flaps of moderate thickness were used. There was no difference between the two groups either in local recurrence rates which were 14.9%, or survival rates which were approximately 40% at ten years. At the M.D. Anderson Hospital where moderately thick flaps are routinely utilized so that postoperative radiotherapy may be given if indicated, the local recurrence rate of 4.7% is among the lowest reported.[5] The figure is identical for both the Stage I histologically negative node group in whom no radiation was given, and the Stage II and III group of borderline operability or a previously disturbed tumor where preoperative radiotherapy was given. Crile[6] reports on 300 consecutive cases operated upon by him for carcinoma of the breast where thick flaps were purposely made. Only three cases were closed with a graft. There was a local recurrence rate of 5%.

Finally, there is the question of preservation of the pectoralis major muscle. This is no new concept, D. H. Patey[7] having begun to do this in 1938, Richard Handley[8] since 1948; John Madden,[9] Hugh Auchincloss Jr.,[10] George Crile Jr.[6] and others more recently have preserved the pectoralis major routinely when operating for carcinoma of the breast. Their results have been at least as good as when the standard radical mastectomy was performed by them. The local recurrence rate has likewise remained unaltered. Comparison between these series and other series employing the standard radical mastectomy is difficult because of the many variables used in classifying breast cancer and in reporting results. Richard Handley[11] reports a ten year survival rate free of disease of 67% in Stage I with axillary nodes negative. This compares favorably with the reported survival rates in practically all series where radical mastectomy has been performed. Better survival figures can be obtained by a more rigid selection of cases, which would exclude some patients from a possible cure by surgical treatment, or by the judicious use of preoperative radiation as shown above. Removal of the pectoral muscle is not a factor in any event.

Utilizing the information gained from these studies, I began to use Patey and Handley's conservative radical mastectomy about five years ago and gradually came to use the operation, with

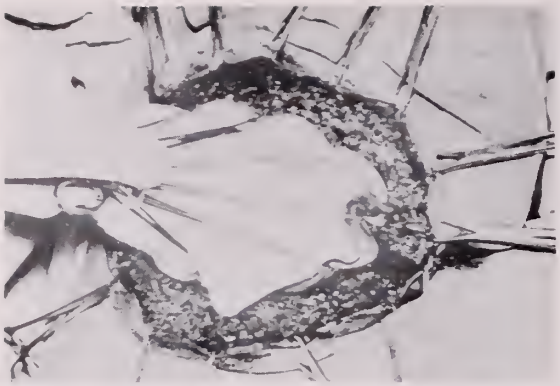


Fig. 1.—Transverse elliptical incisions are made and skin flaps reflected in the usual manner of a radical mastectomy (see text).

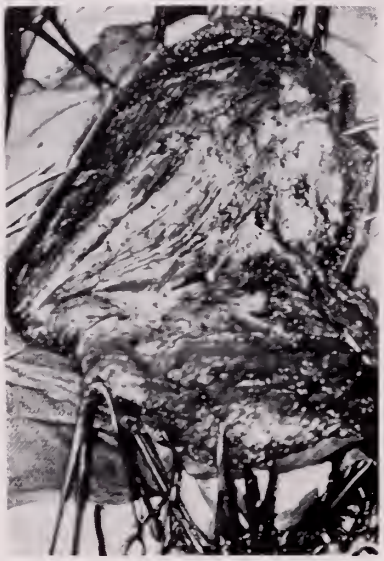


Fig. 2.—The breast with underlying fascias has been dissected from the periphery of the reflected flaps to the lateral border of the Pectoralis major. Note severe radiation reaction from preoperative radiotherapy.

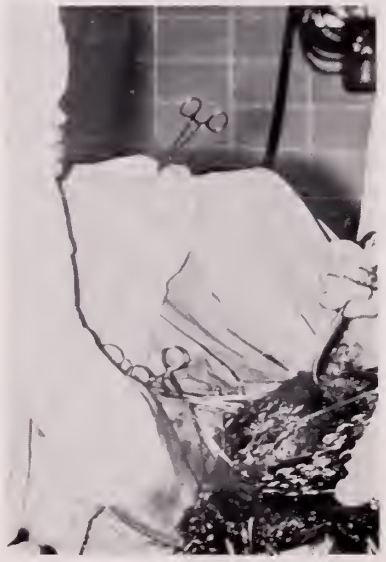


Fig. 3.—Arm is elevated, Pectoralis major retracted and dissection of fascia and interpectoral space continued to apex of axilla.

some modifications, in practically every case of cancer of the breast. I utilize no new techniques but rather a combination of procedures which have been employed or suggested by others; however, as far as I know, they have not been combined as a routine practice.

Biopsy of the tumor is secured with a Franklin modification of the Vim-Silverman needle as soon as the patient is anesthetized. By the time the pa-

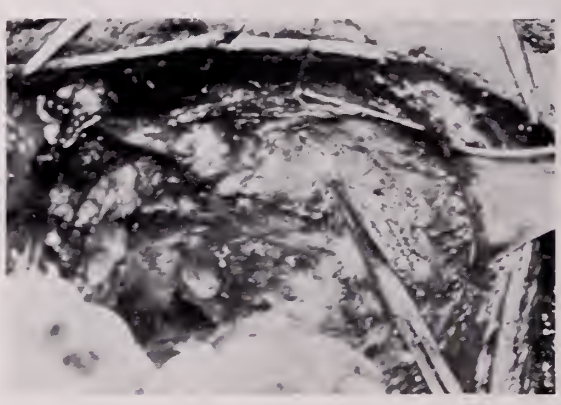


Fig. 4.—The apex of the axilla is reached after dividing tendon of Pectoralis minor. Halsted's ligament demonstrated with hemostat. Note preservation of nerve to Pectoralis major.

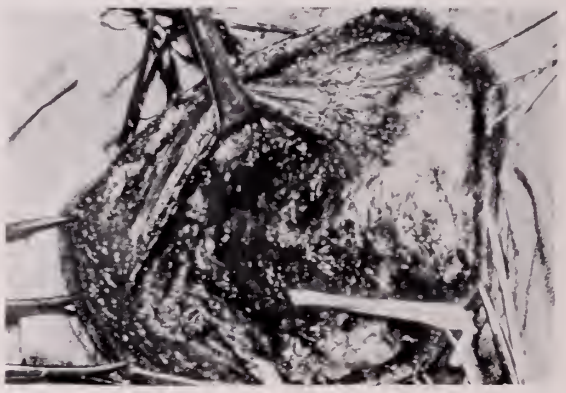


Fig. 5.—Axillary dissection completed in continuity with breast and fascia. Tapes surround long thoracic and lateral thoracic nerves.



Fig. 6.—Closure completed. Note suturing of upper flap to chest wall and "pie-crusting" to relieve tension on skin. Tubes in place for hemo-vac suction.

tient is prepared and draped and the team gowned and gloved, the pathologist's report is usually ready and surgery can proceed at once, saving a good 20 to 30 minutes anesthesia time.

The operation employs transverse elliptical incisions encircling the breast with a margin of normal skin at least 4 to 5 cm. in all directions. The incisions will be varied according to the location of the tumor and may even approach the level of the nipple (which is always excised) in extreme instances. The skin flaps are moderately thick, varying from 2 to 3 mm. at the incision site to 4 to 5 mm. midway to the periphery and tapering to full thickness at the periphery of the undermined skin. The pectoralis major fascia is removed in continuity with the specimen to the lateral border of the muscle, the arm elevated and dissection continued beneath the muscle dissecting the intermuscular fascia and areolar tissue to the chest wall. The pectoralis minor tendon is incised and the nerves to the pectoralis major identified. If they traverse the minor, this muscle is preserved. If they course around the lateral border of the minor, the muscle is taken with the dissection. The remainder of the operation is identical with the standard Halsted radical mastectomy, the axilla being thoroughly dissected from Halsted's ligament medially to the subscapular vessels laterally. Because of the relatively thick flap plus the fact that less skin is removed with the breast, most of the wounds can be closed without a graft. If necessary to close the wound under tension, "pie-crusting" of the skin will give an extra 1½ to 2 cm. of skin. If it is anticipated that a small graft will be needed, thick split grafts can be removed from the angles of the specimen at the beginning of the operation and preserved in saline packs until ready for use.

There are then three basic differences in this technique as compared with the Halsted-Willy Meyer radical mastectomy: (1) smaller skin margins, (2) thicker skin flaps, and (3) preservation of the pectoralis major muscle.

A fourth feature which is utilized in the great majority of cases is the use of transverse or oblique elliptical incisions which are closed without a graft.

I have used this operation in 45 cases. There have been no local recurrences; one patient has died of disseminated disease without evidence of local recurrence, and one patient is living with a metastasis to the lumbar spine. Clinically 25 cases were Stage I, 14 cases Stage II and 6 cases Stage III. Axillary nodes were pathologically negative in 26, but in only 20 cases did the clinical and pathological diagnoses coincide. Although the number of cases is not large and the follow-up period relatively short, the initial results tend to confirm the work and observation of many others, some of whom were cited earlier in this paper.

The conservative radical mastectomy will yield equally as good results as the Halsted radical mastectomy. Excessive resection of skin and extremely thin skin flaps requiring a routine skin graft apparently do not result in a lowered incidence of local recurrence, the only factor by which to gauge the effectiveness of these techniques. Preservation of the pectoralis major muscle neither increases the incidence of local recurrence nor does it limit the effectiveness of axillary dissection. When the pectoralis major fascia or muscle is involved by disease certainly the muscle must be removed, but even here one can often resect only a portion of the muscle and secure a wide clearance of the tumor. An extra dividend, which this method yields, is an apparent decrease in the incidence of edema of the ipsilateral extremity. Finally, the cosmetic and functional result is superior and the application of a prosthesis simpler for the patient.

To return to the question, "Is the Halstead Radical Mastectomy Any Longer Indicated?", I think we can fairly answer, "Rarely."

ADDENDUM: Since submitting this paper for publication, 15 additional patients have had the conservative radical mastectomy described in the text. Eleven were clinically Stage I and four were Stage II. The axillary nodes were histologically negative in all but one of the Stage I cases and in one of the four Stage II cases. Two patients of the original group have died of coronary occlusion. Both were Stage I with histologically negative axillary nodes.

References

1. Halsted, W. S.: Results of Operation for Cure of Cancer of Breast Performed at Johns Hopkins Hospital from June 1889 to January 1894, Ann. Surg. 20:497-555, 1894.
2. Meyer, W.: Improved Method of Radical Operation for Carcinoma of Breast, Medical Record 46: 746-749 (Dec. 15) 1899.
3. Spratt, J. and Donegan, W.: Cancer of Breast, Philadelphia, W. B. Saunders Co., 1967.
4. Auchincloss, H. F. Jr.: Nature of Local Recurrence Following Radical Mastectomy, Cancer 2(3) (May-June) 1958.
5. Fletcher, G. H.: Carcinoma of Breast. Stage II—Radiation Range. Advantages of Pre-operative Irradiation, J.A.M.A. 200:140-141 (Apr. 10) 1967.
6. Crile, G. Jr.: Results of Simplified Treatment of Breast Cancer, Surg. Gynec. & Obst. 118:(3)517-523 (Mar.) 1964.
7. Patey, D. H. and Dyson, W. H.: Prognosis of Carcinoma of Breast in Relation to Type of Operation Performed, Brit. J. Cancer 2:7-13, 1948.
8. Handley, R. S.: Technic and Results of Conservative Radical Mastectomy (Patey's Operation). Progress in Clinical Cancer, New York, Grune and Stratton, 1965.
9. Madden, J. L.: Modified Radical Mastectomy, Surg. Gynec. & Obst. 121:1221, 1965.
10. Auchincloss, H. F. Jr.: Modified Radical Mastectomy and Supervoltage Radiotherapy for Treatment of Primary Operable Cancer of Breast. To be published. Presented at James Ewing Society Meeting, Apr. 25, 1969.
11. Handley, R. S.: Personal communication.

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Causalgia

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As early as 1864, Mitchell, Moorehouse and Keen used the term causalgia to designate a bizarre symptom complex occurring after injury to peripheral nerves.[1] World War II experience indicated that 57% of patients with penetrating wounds involving peripheral nerves required treatment for this condition; however, a high percentage of spontaneous pain resolution was reported by Shumacker.[2]

Causalgia is seen infrequently in civilian practice, but the military surgeon is commonly confronted with this problem in a time of hostilities. Severe burning pain and hyperesthesia, together with trophic and vasomotor changes in the involved extremity, constitute the usual symptom complex. The cause is invariably trauma which incompletely divides a large, peripheral, mixed nerve, usually the median in the upper extremity and the sciatic or its branches in the lower. Pain has been reported in patients following complete division of these nerves, but this is rare. The most popular theory of pathogenesis is cross stimulation between somatic sensory and efferent sympathetic fibres at the site of injury. However, numerous other theories including injury to "afferent" sympathetic fibres also have been advanced.[2]

In this paper we shall present data from 25 patients representing injuries to 14 sciatic nerves, three peroneal nerves, three median nerves alone, and five median nerves associated with the ulnar. Three of the five involved the median and ulnar; one, the median and radial and one, the median, radial and ulnar. All were incomplete lesions except for one ulnar nerve which was completely divided.

Symptoms and Signs

The most common symptom was pain usually described as burning in nature but frequently ill-defined and associated with multiple uncomfortable or unusual sensations. The pain was referred to the distal portion of the involved extremity but not necessarily to the autonomous zone of the injured nerve alone. Hyperesthesia associated with the affected part usually developed. The intensity of pain was variable, with sensory and emotional stimuli leading to exacerbations. The variability and severity made accurate assessment of the injury impossible in many patients. Often they became withdrawn and required increasing medicinal relief.

The time of onset of pain after wounding was inconstant. It usually began immediately but seven to 79 days elapsed before pain became manifest or problematic in 11 of our patients (Table 1). Cases have been reported of pain beginning several months after the injury.[3] Vasomotor changes were not prominent and tended to follow nerve distribution.

Treatment

A sympathetic block always should be performed in these patients prior to definitive surgery since it demonstrates what relief can be expected and, on occasion, may prove to be of lasting benefit. Rasmussen and Freedman report that when

Table 1.—Interval Between Wounding and Onset of Pain

Immediate	2
Less than 2 days	2
2 to 7 days	2
7 to 14 days	4
14 to 28 days	4
30 days	1
60 days	1
79 days	1
Undetermined	8

the effective duration of the first block exceeds the expected duration of the anesthetic subsequent blocks may give increasingly longer pain-free intervals and even permanent relief.[1]

In different series, Rasmussen and Freedman and Shumacker and his associates report that permanent relief from sympathetic blocks varied from 0 to 3%.[4,5] In these studies, 23 patients had five blocks, two had three blocks, and all others received only a single block.

Spurling reported the first sympathectomy for causalgia in 1929[6] and subsequent results have been very satisfactory. The preganglionic and postganglionic procedures have been successful in the upper extremity,[4] and the postganglionic divisions have been universally accepted in the lower extremity. Other procedures have included neurolysis and periarterial sympathectomy, which almost always fail, and resection of the damaged nerve, which is almost always curative but usually leaves the patient with a deficit.

In our patients, the procedures employed varied according to the extremity involved and the experience of the surgeon. In the upper extremity, seven supraclavicular and four transthoracic sympathectomies were performed. Each of these included the removal of ganglia C-8 through T-3. In the lower extremity, ipsilateral removal of lumbar ganglia 2, 3, and 4 proved effective.

Results

Two patients in our series received permanent relief after sympathetic blocks; one remained completely comfortable following a single block. Causalgia had developed after popliteal nerve contusion. The other with contusion of the sciatic nerve experienced progressively decreasing pain following two blocks, with an easily tolerated residual.

Sympathectomies were believed to be successful in all our patients. Complete immediate relief was observed in 17 and complete relief within one week in three. Four patients experienced some residual discomfort but not sufficient to interfere with normal activities. It was believed that the pain could be explained by sympathetic cross-over of fibres that were not interrupted at sympathectomy.

A recurrence of severe pain within a week following lumbar sympathectomy was noted in one patient, a 19-year-old private first class with multiple fragment wounds of the left thigh and calf who complained of severe pain in his toes and the dorsum of the left foot. A lumbar sympathetic block of L-2, 3, and 4 produced good relief for the duration of the anesthetic. Subsequently a lumbar sympathectomy produced good initial results but the pain gradually returned to original severity by the end of one week. Several weeks later, while undergoing decortication of the left lung for a wound sustained in the same battle, sympathetic chain T-6 to T-12 was removed incidently and the patient experienced lasting relief of all pain.

This also has been reported by Ulmer and Mayfield.[3]

Follow-up was limited to 30 to 60 days with our patients since they either were evacuated to the United States or returned to duty. Mayfield followed all his patients for six months and found no recurrences.[7] Mortality has been zero. Postoperative complications included a postsympathectomy syndrome after lumbar sympathectomy and atelectasis and pleural effusion with transthoracic sympathectomy.

True controls were not possible in our situation. Delay in treatment beyond one week, however, resulted in markedly withdrawn patients with disuse atrophy of the involved extremity, a condition frequently seen early in this series.

Conclusions

In patients with trauma of the extremities, causalgia is not a rare entity.

Careful preoperative evaluation is essential for best results.

Sympathetic blocks are not only necessary for the diagnosis but occasionally produce lasting relief.

Sympathectomy produces complete relief in most patients.

Prompt treatment is recommended once the diagnosis is established.

References

1. Mitchell, J. W.; Moorehouse, G. R., and Keen, W. W.: Gunshot and Other Injuries of Nerves, Philadelphia, J. P. Lippincott Co., 1864.
2. Shumacker, J. F.: Causalgia. III. A General Discussion, Surgery 24:485, 1948.
3. Ulmer, J. L. and Mayfield, F. H.: Causalgia. Study of 75 Cases, Surg., Gyn. & Obst. 83:789, 1946.
4. Rasmussen, T. B. and Freedman, H.: Treatment of Causalgia, J. Neurosurg. 3:165, 1946.
5. Shumacker, H. B.; Speigel, I. J., and Upjohn, R. H.: I. Causalgia, Role of Sympathetic Interruption in Treatment, Surg., Gyn. & Obst. 86:76, 1948.
6. Spurling, R. G.: Causalgia of the Upper Extremity by Dorsal Sympathetic Ganglionectomy, Arch. Neurol & Psychiat. 1:1087, 1929.
7. Mayfield, F. H. and Devine, J. W.: Causalgia, Surg., Gyn. & Obst. 80:631, 1945.

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Dermatoglyphic Analysis in Medicine

Finger, Palm and Sole Prints as Indicators of Chromosomal or Congenital Abnormalities

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Examples of personal identification by finger ridge patterns can be found in antiquity. These patterns were first scientifically classified by Sir Frances Galton in 1892,[1] whose study suggested that they were inherited characteristics passed on from parent to child. This initial work was the cornerstone for present day police and immigration identification methods. Following Galton's excellent work in establishing a scientific basis and classification of the ridge patterns on the fingers and palms, dermatoglyphic studies were used in genetics and anthropology. The usefulness of dermatoglyphs in medicine was first demonstrated by the anatomist Harold Cummins in 1936.[2] He showed that these patterns in mongoloids were characteristic, and in most patients diagnostic of the condition.[3]

One reason the dermal patterns are useful as a diagnostic aid in medicine is that they may be examined easily without the aid of special or expensive equipment and usually are readily available for examination. The present report demonstrates the important dermal pattern areas on the hand and feet and is but a short summary of some of the medical conditions in which these patterns are either diagnostic or suggestive of a clinical diagnosis.

Classification of Dermal Patterns

Fingers

While individual ridges on the finger tips are quite characteristic (Fig. 1), the overall accumulation of ridges form patterns which are classified into three basic groups known as arches, loops and whorls (Fig. 2). Fundamental in determining the type of pattern is the presence of a triradius which is the point where the type lines diverge after running parallel to each other for a short distance. An arch has no triradii (Fig. 2a), a loop has one (Fig. 2b) and a whorl has two or more (Fig. 2c). The loop is further classified as radial or ulnar depending upon the direction it opens. An ulnar loop has open portions facing the ulnar side of the hand and a radial loop facing the radial side.

A useful parameter in the study of patterns on finger tips is the count of ridges within the core of a pattern. It consists of the number of ridges which cut or touch a straight line running from the triradius to the center of the pattern (Fig. 3). The ridge count is the basis for quantitative studies and gives an indication of the size and type of patterns present.[4]



Fig. 1.—Photograph of finger tip showing ridges forming whorl pattern.

From the University of Miami Child Development Center, Miami.

Palms and Soles

The palm (Fig. 4) is divided into six areas and the ridges in these areas are classified according to the pattern that is present. The areas are hypothenar, thenar and four interdigitals. One easy method of keeping and demonstrating the patterns is to draw the main lines off the triradii (Figs. 5 and 6). Similar main line drawings may be made of the soles. The major diagnostic area of the sole is the hallucal area beneath the first toe (Figs. 7 and 8).

One important diagnostic point on the palm is the location of the t triradius. In normal palms, it is usually found near the flexion creases of the wrist. One method of evaluating the position of the distal t triradius is to measure it as an angle, referred to as the atd angle. The atd angle is that angle subtended at the most distal triradius by the most medial triradius (d, triradius) and the most lateral triradius (a, triradius) on each hand (Fig. 9).

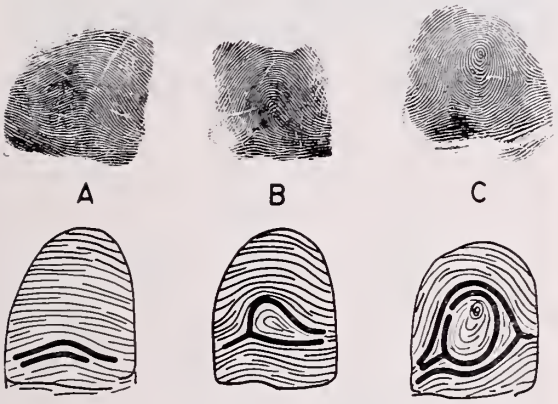


Fig. 2.—Upper three figures are reproductions of finger prints using a special black printing substance. Lower three figures show main line drawings of finger prints. A is an arch pattern, B is a loop pattern and C is a whorl pattern.



Fig. 3.—The line cutting across ridges and end points used in counting ridges. Print on the left is a whorl and on the right a loop.

Examples of Clinical Syndromes Associated with Changes in the Dermatoglyphic Patterns

Mongolism (Down's Syndrome)

Mongolism was the first human abnormality in which dermal patterns were shown to be unusual, and it remains the medical syndrome whose dermal patterns have been most thoroughly examined.[5] The essential findings are demonstrated in Figure 10. The patterns of the finger tips are usually all ulnar loops. Occasionally a radial loop on finger four or five strengthens the diagnosis. There tends to be a loop in the third interdigital area of the palm and there is a distal t triradius which is reflected in having an increased atd angle. The most diagnostic dermal pattern is on the hallucal area of the sole. An open field pattern, without a triradius, is highly diagnostic. This type pattern is also referred to as an arch tibial pattern.[6] A small distal loop of less than 20 ridges on the hallucal area is also suggestive of the diagnosis. As the combinations of dermal patterns increase, the diagnosis is strengthened.



Fig. 4.—Photograph of palm showing ridges in main areas.





Fig. 7.—Photograph of the sole showing a distal loop in the hallucal area.

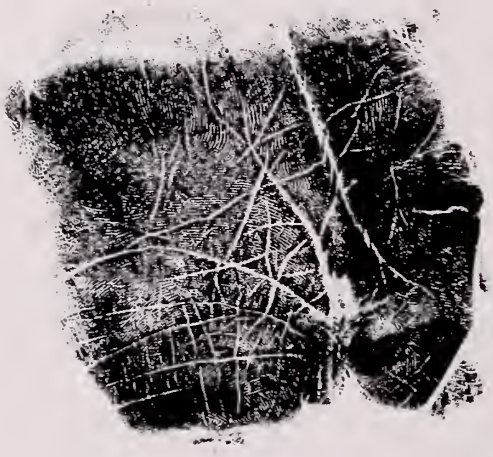


Fig. 5.—Palm print below and, above, a drawing of the main line ridges demonstrating the patterns in these areas.





Fig. 6.—Print of hand on right and, on left, a drawing of lines demonstrating the patterns on the palm and finger tips.



Fig. 8.—Print of sole on left and, on right, a drawing of the main lines demonstrating the patterns.



Fig. 9.—Print of palm showing the points for measuring the atd angle.

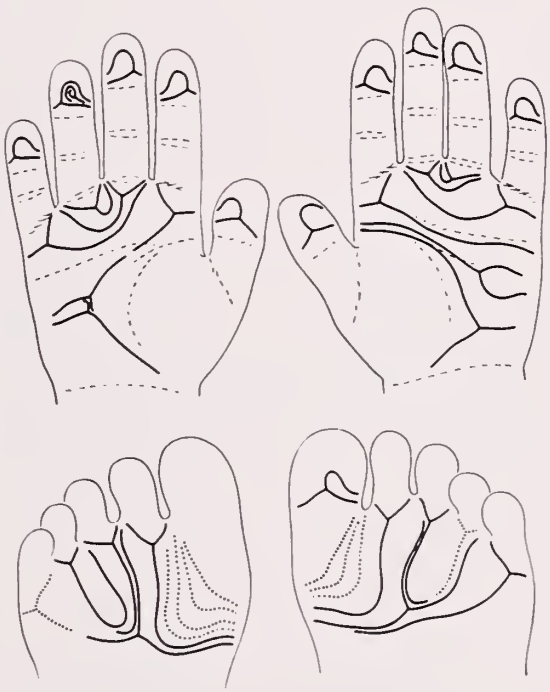


Fig. 10.—Drawing of main lines of palms and soles of a patient with mongolism. The dermatoglyphic patterns throughout are indicated by continuous lines except where there is doubt about the configuration; in such circumstances the radiants are represented by dotted lines from triradii judged to be present. Dotted lines are also used sometimes to show the directions of ridges in open fields. Flexion creases are shown by broken lines.

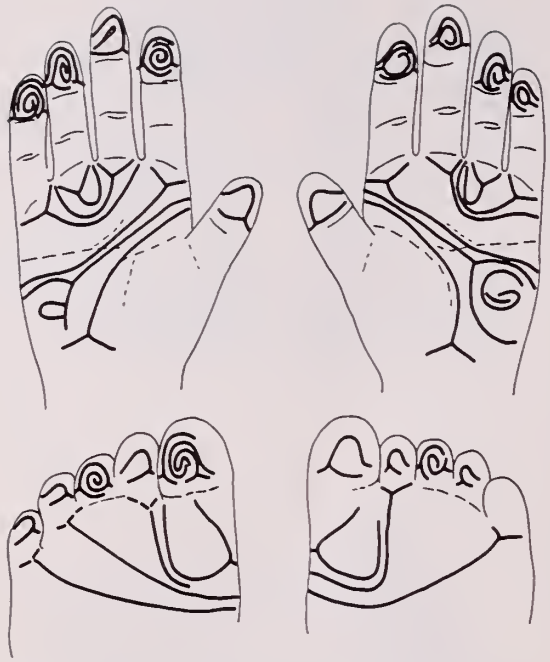


Fig. 11.—Drawing of main lines of palms and soles of a patient with Turner's syndrome.

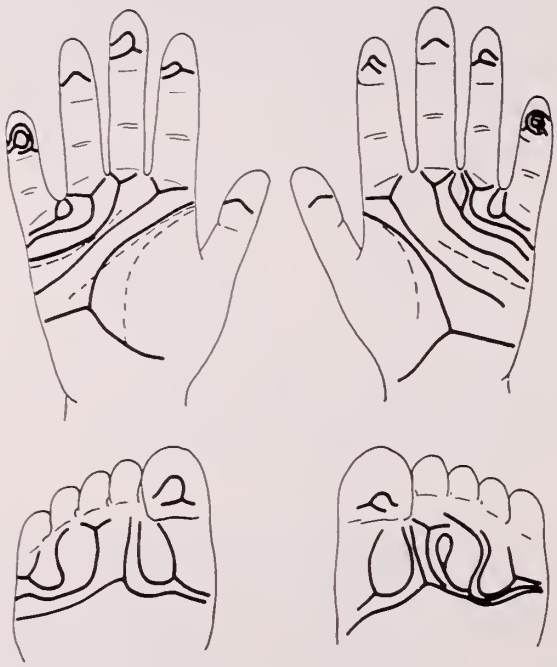


Fig. 12.—Drawing of main lines of palms and soles of a patient with "Cri du Chat."

Turner's Syndrome

The features of Turner's syndrome (gonadal dysgenesis) are well known, short female with a webbed neck. Some individuals show puffiness or edema of the lower extremities at the time of birth. The condition is due to the loss of a female sex chromosome; patients have 45 chromosomes instead of 46 and one female sex chromosome instead of two.

The dermal patterns are shown in Figure 11. The total ridge count on the finger tips is increased and the associated patterns are usually large whorls or loops. The mean total ridge count (all ten fingers) for females is 126; individuals with Turner's syndrome tend to have a count greater than this. The hypothenar area not infrequently will show a pattern.[7]

Cat Cry Syndrome (Cri Du Chat)

This is another syndrome associated with an abnormal chromosome. Part of the upper arms of a number 5 chromosome are missing. These individuals have an unusual facial appearance, but a clue to diagnosis is their unusual cat-like cry during the early months of life. The dermal patterns (Fig. 12) tend to have a low ridge count on the finger tips, a loop in the fourth interdigital area of the palm and the main lines coming off triradii near the fingers on the palm tend to run in a vertical direction.

Rubinstein-Taybi Syndrome (Broad Thumbs and First Toe Syndrome)

In this syndrome the patient shows an unusual facial appearance, the nose being rather large and beaked; however, the important features are the large, broad thumbs and great toes. The etiology of this syndrome is not determined, but the dermatoglyphic patterns on the hands and feet are quite characteristic (Figs. 13 and 14). The ridge count on the finger tips is low. There is a large pattern on the thenar area of the palm (Fig. 13). The hallucal area of the sole shows a complex pattern of a distal loop in association with a fibular loop.[8]

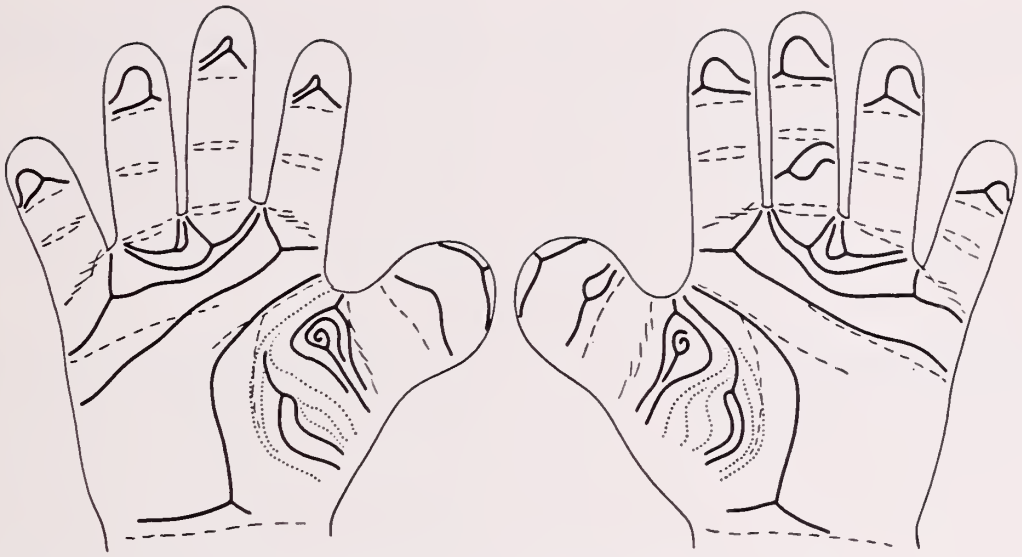


Fig. 13.—Drawing of main lines of palms of a patient with Rubinstein-Taybi syndrome.



Fig. 14.—Drawing of main lines of sole of a patient with Rubinstein-Taybi syndrome.

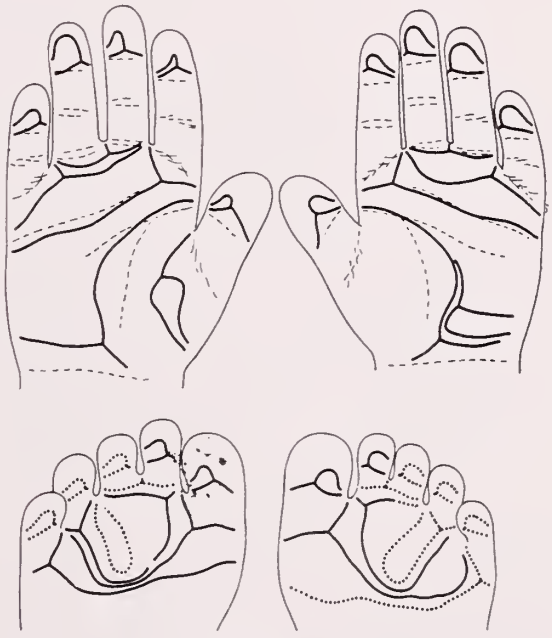


Fig. 15.—Drawing of main lines of palms and soles of a patient with the de Lange syndrome.

De Lange Syndrome

The de Lange syndrome is another interesting condition which is receiving a great deal of clinical and research attention. These individuals tend to be reduced in height, are mentally retarded and characteristically have bushy eyebrows that meet in the mid-line. Their fingers tend to be short and stubby. Certain characteristic dermal patterns are quite helpful in the diagnosis (Fig. 15). The finger tip patterns tend to show loops, and a radial loop on the second or third finger is a helpful sign.[9] Instead of a usual triradius being present under the third and fourth finger on the palm, there is an interdigital triradius between these fingers (Fig. 15). There also tends to be a pattern in the thenar area.

References

1. Galton, F.: Finger-prints, London, Macmillan and Co., 1892.
2. Cummins, H.: Dermatoglyphic Stigmata in Mongoloid Imbeciles, Anat. Rec. 64:11, 1936.
3. Cummins, H.: Dermatoglyphic Stigmata in Mongoloid Imbeciles, Anat. Rec. 73:407, 1939.
4. Holt, S. B.: The Correlations Between Ridge-Counts on Different Fingers Estimated from a Population Sample, Ann. Hum. Genet., London, 23:459, 1959.
5. Penrose, L. S. and Smith, G. F.: Down's Anomaly, Boston, Little, Brown and Co., 1966.
6. Ford-Walker, N.: The Use of Dermal Configurations in the Diagnosis of Mongolism, J. Pediat. 50:19-27, 1957.
7. Holt, S. B. and Lindsten, J.: Dermatoglyphic Anomalies in Turner's Syndrome, Ann. Hum. Genet. 28:87, 1964.
8. Berg, J. M.; Smith, G. F.; Ridler, M. A. C.; Dutton, G.; Green, E. A., and Richards, B. W.: On the Association of Broad Thumbs and First Toes with Other Physical Peculiarities and Mental Retardation, J. Ment. Def. Res. 10:204, 1966.
9. Smith, G. F.: Study of the Dermatoglyphics in the De Lange Syndrome, J. Ment. Def. Res. 10:241, 1966.

Dr. Smith, University of Miami School of Medicine, Miami 33152.

A Machine Scored Medical Examination Form For the State Universities of Florida

W. J. Coggins, M.D., and Ewen M. Clark, M.D.

In Florida's state university system each year some 18,000 new students are required to submit a medical history and physical examination form, completed by the physician of their choice. These forms, mailed to the universities after completion, are reviewed individually by the physicians there. This requires considerable man-hours of professional time. We have developed a standardized form in collaboration with the health services of the larger universities in the state which can be processed by a machine-scoring device. It will be used throughout the university system, and physicians should find its use more convenient than the varied formats of those previously used.

Description

This form consists of four pages. Page 1 has an introductory and explanatory letter from the Director of the Student Health Service to the student containing information regarding immunization requirements and advice on how to complete the form. The remaining pages are in a question-response mode. Pages 2 and 3 are for social and demographic information, family medical history and personal medical history. Page 4 is for the recording of the physical examination. It requires a "Yes" or "No" response to specific questions (Fig. 1). Adequate space is provided for a narrative explanation whenever this appears to be appropriate.

Processing

The processing of this form can best be illustrated graphically (Fig. 2). In outline, the responses are read by an IBM 1230 machine which generates a set of punch cards. These are then processed by an IBM 1401 computer which generates a printed document listing each student under one of four categories, which are as follows:

Group I—Those students who for reason of a physical or medical deficit are unable to participate in unlimited physical activity. Students in this group will be seen by a physician and evaluated on an individual basis during the registration process.

Group II —Those students who are able to participate in unlimited physical activity but will require medical support. Students in this group are given appointments to be seen in the health service within the first few weeks of their entering the university.

Group III—Those students who will or may require mental health counseling while on campus.

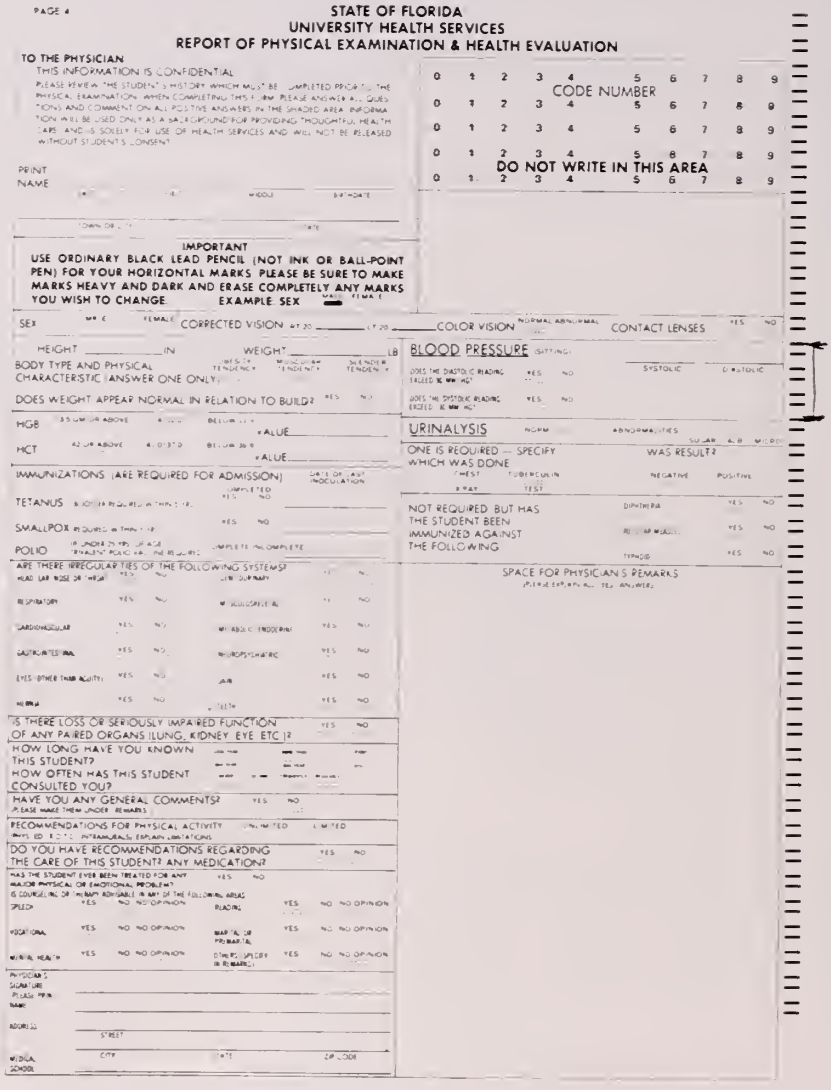
Group IV—All students not included in Groups I-III.

Benefits

The benefits accruing from the introduction and use of this form fall into three general areas.

Student Health Services: An automated interpretive program of this type can remove a considerable non-clinical work load from the physician, allowing him to perform in the area for which he is best suited, i.e., diagnosis and treatment. Early and adequate identification of health problems in students is important for faculty, administration and the student in selecting proper course assignments and housing arrangements, in addition to the necessary planning for the student's continuing medical care.

The use of electronic data processing to assign students to particular groups should eliminate some of the inevitable errors made in the past when the university physician was confronted with large stacks of such forms to be screened by hand and eye at one sitting.



PAGE 4

STATE OF FLORIDA
UNIVERSITY HEALTH SERVICES
REPORT OF PHYSICAL EXAMINATION & HEALTH EVALUATION

TO THE PHYSICIAN

THIS INFORMATION IS CONFIDENTIAL

PLEASE REVIEW THE STUDENT'S HISTORY WHICH MUST BE COMPLETED PRIOR TO THE PHYSICAL EXAMINATION. WHEN COMPLETING THIS FORM PLEASE ANSWER ALL QUESTIONS AND COMMENT ON ALL POSITIVE ANSWERS IN THE SHADED AREA. INFORMATION WILL BE USED ONLY AS A BACKGROUND FOR PROVIDING THOUGHTFUL HEALTH CARE AND IS SOLELY FOR USE OF HEALTH SERVICES AND WILL NOT BE RELEASED WITHOUT STUDENT'S CONSENT

CODE NUMBER

DO NOT WRITE IN THIS AREA

PRINT NAME

IMPORTANT
USE ORDINARY BLACK LEAD PENCIL (NOT INK OR BALL-POINT PEN) FOR YOUR HORIZONTAL MARKS. PLEASE BE SURE TO MAKE MARKS HEAVY AND DARK AND ERASE COMPLETELY ANY MARKS YOU WISH TO CHANGE. EXAMPLE: SEX

SEX MALE FEMALE CORRECTED VISION COLOR VISION NORMAL ABNORMAL CONTACT LENSES YES NO

HEIGHT IN WEIGHT LB

BODY TYPE AND PHYSICAL CHARACTERISTIC (ANSWER ONE ONLY)

DOES WEIGHT APPEAR NORMAL IN RELATION TO BUILD? YES NO

HGB VALUE

HCT VALUE

BLOOD PRESSURE (SITTING)

SYSTOLIC DIASTOLIC

URINALYSIS NORM ABNORMALITIES

IMMUNIZATIONS (ARE REQUIRED FOR ADMISSION)

TETANUS

SMALLPOX

POLIO

ONE IS REQUIRED — SPECIFY WHICH WAS DONE

WAS RESULT?

NEGATIVE POSITIVE

NOT REQUIRED BUT HAS THE STUDENT BEEN IMMUNIZED AGAINST THE FOLLOWING

DIPHTHERIA YES NO

TYPHOID YES NO

ARE THERE IRREGULARITIES OF THE FOLLOWING SYSTEMS?

RESPIRATORY YES NO

CARDIOVASCULAR YES NO

GASTROINTESTINAL YES NO

EYES (OTHER THAN ACUITY) YES NO

YES NO

MUSCULOSKELETAL YES NO

METABOLIC (ENDOCRINE) YES NO

NEUROPSYCHIATRIC YES NO

SKIN YES NO

YES NO

IS THERE LOSS OR SERIOUSLY IMPAIRED FUNCTION OF ANY PAIRED ORGANS (LUNG, KIDNEY, EYE, ETC.)? YES NO

HOW LONG HAVE YOU KNOWN THIS STUDENT?

HOW OFTEN HAS THIS STUDENT CONSULTED YOU?

HAVE YOU ANY GENERAL COMMENTS? YES NO

PLEASE MAKE THEM UNDER REMARKS

RECOMMENDATIONS FOR PHYSICAL ACTIVITY UNLIMITED LIMITED

DO YOU HAVE RECOMMENDATIONS REGARDING THE CARE OF THIS STUDENT? ANY MEDICATION? YES NO

HAS THE STUDENT EVER BEEN TREATED FOR ANY MAJOR PHYSICAL OR EMOTIONAL PROBLEM? YES NO

IS COUNSELING OR THERAPY ADVISABLE IN ANY OF THE FOLLOWING AREAS

SPEECH YES NO NO OPINION

VOCATIONAL YES NO NO OPINION

MENTAL HEALTH YES NO NO OPINION

PLACING YES NO NO OPINION

MARITAL OR PREMARITAL YES NO NO OPINION

OTHER (SPECIFY IN REMARKS) YES NO NO OPINION

SPACE FOR PHYSICIAN'S REMARKS

PHYSICIAN'S SIGNATURE

PLEASE PRINT NAME

ADDRESS STREET CITY STATE ZIP CODE

MEDICAL SCHOOL

Figure 1

FAMILY PHYSICIANS: All state universities will use this new form. The annoyance and occasional confusion which arises when completing different forms requiring different data for several universities is thus removed. Since some students apply to more than one university in the state system, the transcription of information to be sent to the second school should be very simple.

RESEARCH: At the present time there is a paucity of standardized medical data on individuals of college age. It is recognized that there are significant regional variations in such standard clinical measurements as blood pressure level or hemoglobin level. These variations must be recognized and understood before the usually accepted range of "normal" can be accurately applied. By having such information presented in a standardized manner from students throughout the university system we will have the opportunity to develop more meaningful information on mor-

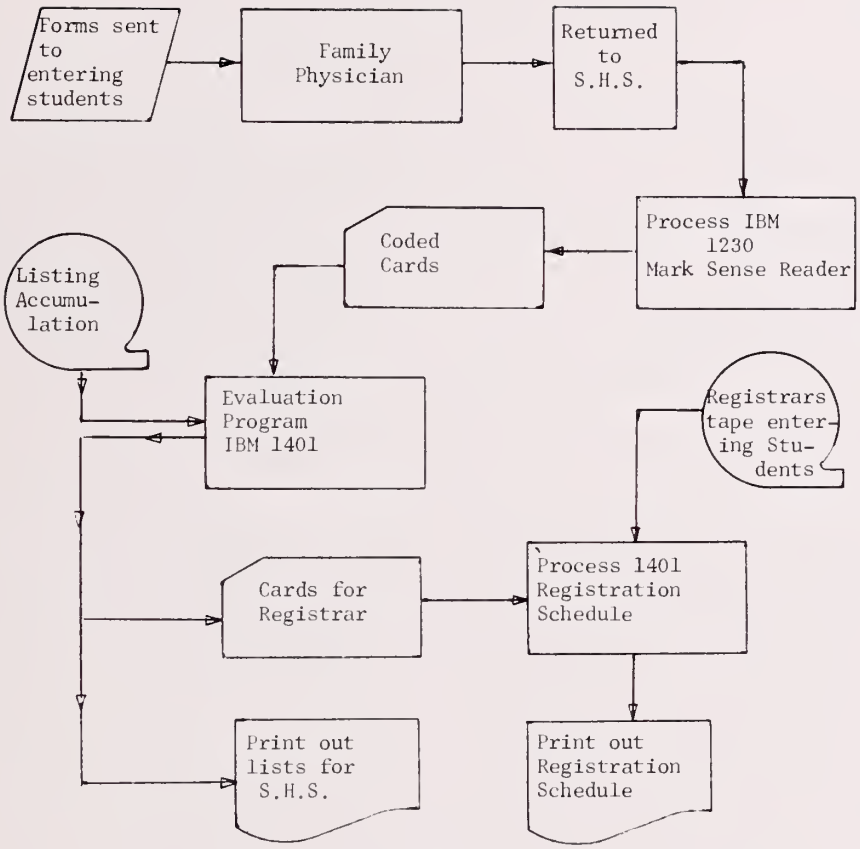


Figure 2

bidity in this age group. This information should lead to more intelligent planning of the health needs of college students in the future.

Conclusion

The digital computer offers several advantages in handling large amounts of data. The risk of error is less than with human interpretation, and the time saved can be better spent in evaluating those students who have health problems. The benefits to be derived from a machine scored standardized health form range from the physician's office to the researcher's desk.

Dr. Coggins, University of Florida, Gainesville 32601.

Thanks are due to Dr. William A. Hall, former director, Student Health Service, University of Florida, for much of the early developmental work on this form.

From the Editor

Franz Stewart

December Cover

December Twenty-Fifth
From Ras Shamra and the Semitic Shamash
From Helios and the feast of Sol Invictus
(unconquered sun)
Teuton, Greek, Roman, Jew—
And Pagan forest green and red
All came to join the Christian fish
To celebrate a feast day of great joy!

December Cover

The skeleton of a grunt is a cat's eye view of what a good meal should look like when you stretch out on the ground to enjoy the warmth of a full stomach and a warm sun. Along the Florida Keys on a still, quiet day the old sponge fisherman tied up his boat secure to a jutting coral bank, and slowly sauntered over the rough, jagged path to a wooden shanty.

The planks were as sunbleached and dry as the skin of the old Conch. Both had been cured by months and months of exposure to salt water and the sun. The smell of frying fish was a cordial welcome as he came in. Few words were spoken but there was surcease and comfort, and the homecoming was festive, made so by the anticipation of grits and grunts! What better, more staple, more readily available feast dish!

Festivity

Harvey Cox writes in the Saturday Review of Oct. 25th "In Praise of Festivity." Have we lost our capacity for festivity and fantasy? he asks. The degree to which we have lost our ability to celebrate joyously may represent the price paid for life in a "dreary, fact-ridden world." "Celebrating and imagining are integral parts of his humanity."

Festivity and fantasy may be the measure of our capacity for gaiety and our separation from machinery and automatic existence. Please ask. This is December. Can I joyously celebrate Christmas or have I become "fact-ridden?"

Keep A Light Touch

In a meeting the other day a discussion was in progress and the aim seemed to be to come to a decision. Facts were gathered and considered and the decision ground out, some believed without emotion. The authority and power of the group was exercised.

Computors may be able to do this, become thus depersonalized, but I suspect an element of feeling even in the computor, placed there by a rare puckish feed-in. Lesser scientists in our day may lose the imaginative and creative essential, under a dull mass of fact, boredom and turn-out.

Man is still man even in a meeting. He may stifle and smother the emotional responses gained from his past and his contemplation of the future but his vote will still be made upon the basis of his feelings!

The chair must recognize the need for seriousness, for anger, for the full play of emotions and with a dash of lightheartedness set the stage for man to be himself. If this is done he can unburden himself of restriction and respond to questions with the enthusiasm, compassion and inventiveness so important to pace-setting and wise judgment.

Group Practice

Clyde M. Collins, M.D.

Affirming that services are cheaper and of better quality in the team approach to health care than in solo practice, special interest groups as the Department of Health, Education, and Welfare, labor unions and insurance companies are recommending that practice associations replace the solo or "isolation" practitioner. The single-specialty groups, the multi-specialty groups and the prepaid groups—all are touted as providing complete medical care for today's patients. And since group practice has become such a burning issue both within the profession and without, it behooves us to examine all aspects of this form of medical care.

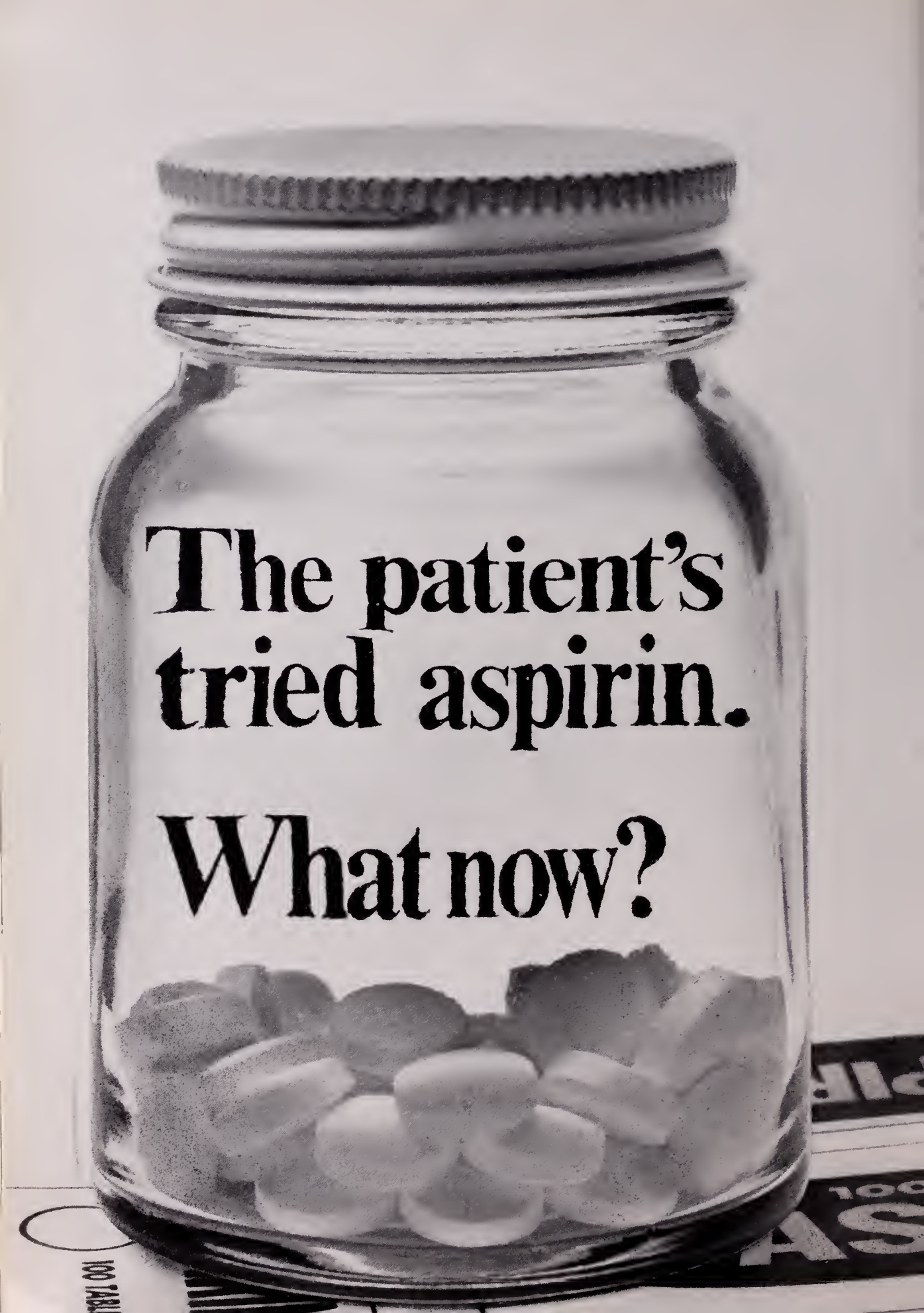
Some 20 years ago, less than three per cent of all self-employed physicians served on group staffs, but in our changing society, with the pressures of social and economic forces, more and more practitioners are entering groups and latest reports show 11 per cent of all physicians now so employed. Fragmentation of health service forces, the continuing growth of specialization and the shrinkage of the general practitioner population—all are shored up by group practice in that it affords ready access for consultation and referral, readily available facilities and equipment, with conveniently centered patients' medical records. Employed paramedical and ancillary personnel perform supportive and supplementary services so the energies and skills of each practitioner can be more sharply focused on professional matters. High quality care, encouraged by professional interchange of views in associations, suggests that such practice can make possible more efficient use of scarce manpower, increase physician productivity and lower the costs of health care.

Yet it is argued that there is no magic in group practice, for efficiency in seeing patients is not a function of the number of doctors in a practice, but rather of how hard each doctor is willing to work and the quality of care depends on the quality of personnel delivering the care. Comprehensive benefits obviously are gained only from the multi-specialty group while group practice may benefit the physician more than it does the patient, for the physician lives in the best of all possible medical worlds, while the patient often gets more goods and less services than he needs, usually paying more for each unit of service.

In prepaid groups, statistics do show reduction in hospitalization rates and incidence of elective surgery. Some question, however, whether such facts actually reflect a higher quality or more efficient care, raising the possibility that over-utilization is replaced in groups by an equally undesirable tendency to under-utilization. Ineffective use of personnel and facilities seems to creep into any sized group while patients lose close identity with one physician and find themselves adrift among specialists without an individual doctor with whom they can establish a relationship. Proponents see group practice as inevitable, averring that their growth has been not so much a matter of preference as the natural evolution of health care, offering an inducement of eliminating the brutal pace private physicians now follow, giving them a longer and more leisurely life. Yet the desire of many physicians to work a 40-hour week is subservient to the successful promotion of group practice by hospitals, government and consumer interests, most of which are at work to ultimately force physicians out of the independent practice of medicine, thereby reducing them to vassals of lay bureaucrats. The dehumanization and impersonality of such a system, sometimes having a germ-like effect on conscientious members who wish to practice first class medicine but are discouraged from doing so, can be breeding grounds of medical mediocracy. Here, there may be no free choice of physician, while the physician has no free choice of patients, so may find it easier to put the interest of the group before the patient, becoming less interested in patients as people and more as a source of income.

Ideally, group practice should be a functioning productive industry with such components as automated testing, computerization and mass production techniques, all so planned and organized as to produce efficient, humane and warm

(Continued on page 926)


The patient's
tried aspirin.
What now?

There's a good chance your patient needs more than a non-prescription analgesic for pain relief. Especially after self-medication has failed.

Because continuing, increased pain and discomfort may in part be a reflection of anxiety, Equagesic is worthy of consideration. In a single, non-narcotic preparation, it helps relieve pain . . . *and* associated anxiety and tension.

Tablets

Equagesic®

(meprobamate and ethoheptazine citrate with aspirin) Wyeth

IN BRIEF

Contraindications: History of sensitivity or severe intolerance to aspirin, meprobamate or ethoheptazine citrate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore, it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

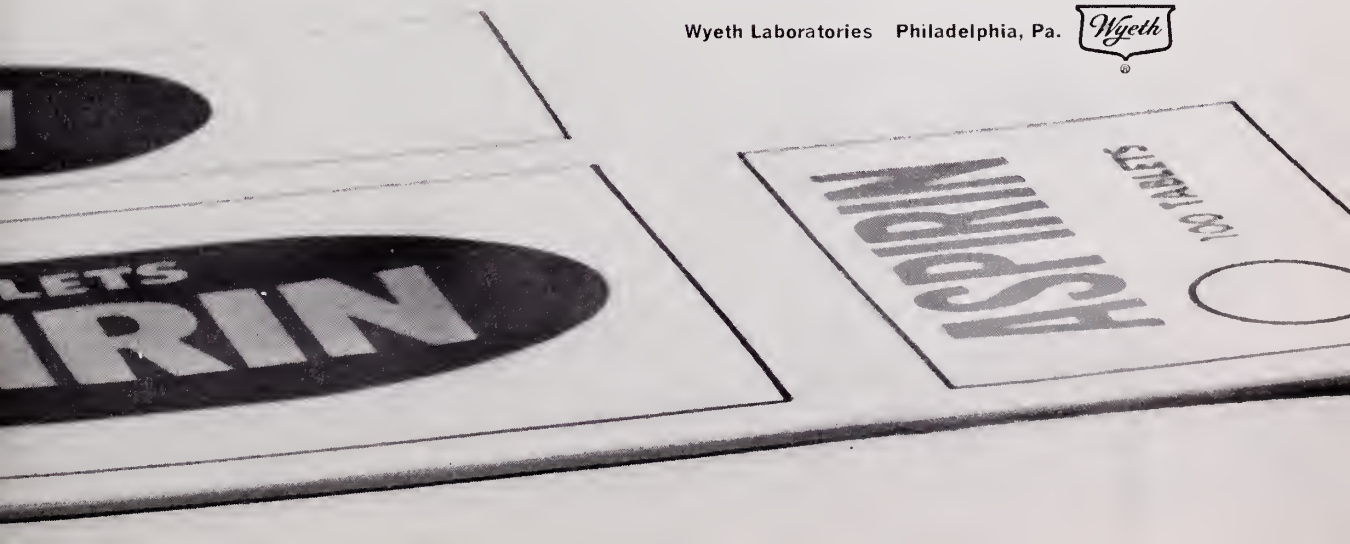
Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics—has resulted in dependence or habituation. Withdraw gradually after prolonged excessive dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance, with resultant slowed reactions and impaired judgment and coordination. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, patients should not operate machinery or drive. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously and in small amounts to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with gastric lavage and appropriate symptomatic therapy (CNS stimulants and pressor amines as indicated). Two instances of accidental or intentional significant overdosage with ethoheptazine and aspirin have been reported. These were accompanied by CNS depression (drowsiness and lightheadedness) but resulted in uneventful recovery. On basis of pharmacologic data, CNS stimulation could be anticipated, with nausea, vomiting and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]).

Adverse Reactions: Ethoheptazine and aspirin may cause nausea with or without vomiting and epigastric distress in a small percentage of patients. Dizziness is rare at recommended dosage. Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses. Such patients may have had no previous contact with meprobamate and may or may not have an allergic history. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, discontinue meprobamate; do not reinstitute. Severe reactions, observed very rarely, include fever, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. These cases should be treated symptomatically including, when indicated, such medication as epinephrine, antihistamine and possibly hydrocortisone. A few cases of leukopenia, usually transient, have been reported on continuous use. Rarely, aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported, almost always in presence of known toxic agents.

Overdosage: See precautions section for management of overdosage.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa. Wyeth®



personal medical care. The keystone in this entire system could be the physician of initial contact who should be endowed with all the virtues of the family physician, in order to refer each patient to all the other elements of the system, the diagnostic procedures, the drugs, the hospital, the nursing home and then getting the patient back for preventive medicine, health counseling and continuity of care. Thus, the ultimate goal would be not the rendition of services but the attainment of better health for the community it serves.

While group practice may not provide cheaper medical care, it does appear that it can offer excellent care of a more comprehensive type. Before passing judgment, all available information should be obtained and reviewed, followed by a lot of thinking, talking and communicating. Rather than bemoaning its shortcomings or criticizing its vices, we should work to eliminate its weaknesses, correct its deficiencies and improve its virtues, under physicians' direction, guidance and control. This won't be easy, but now is the time that plans should be drawn for future medical care systems and newer methods of health care delivery before some outside third party does it for us. The solution requires combining the efficiency and economy of groups with the autonomy, integrity and individuality of solo practitioners. □

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(Warning: May be habit forming)
atropine sulfate, 0.025 mg. (1/2,400 grain)

body fluids...
electrolytes...
patients from exhaustion

Lomotil acts promptly and directly to lower the excessive intestinal motility of diarrhea. This therapeutic restraint on the overactive bowel allows a normal or more nearly normal reabsorption of water and electrolytes.

The proficiency of Lomotil in conserving body fluids and electrolytes often saves patients from the exhaustion that accompanies prolonged diarrhea.

Lomotil acts to control the intestinal mechanisms of diarrhea; therefore, it is highly useful in controlling diarrhea associated with:

gastroenteritis · acute infections · functional hypermotilit
irritable bowel · ileostomy · drug-induced diarrhea

Warnings Lomotil should be used with caution in patients taking barbiturates and with caution, if not contraindicated, in patients with cirrhosis, advanced liver disease or impaired liver function.

Precautions: Lomotil is a Federally exempt narcotic with theoretically possible addictive potential at high dosage; this is not ordinarily a clinical problem. Use Lomotil with considerable caution in patients receiving addicting drugs. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur, signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils, tachycardia; continuous observation is necessary. The subtherapeutic amount of atropine sulfate is added to discourage deliberate overdosage.

Adverse Reactions: Side effects reported with Lomotil therapy include nausea, sedation, dizziness, vomiting, prurilus, restlessness, abdominal discomfort, headache, angioneurotic edema, giant urticaria, lethargy, anorexia, numbness of the extremities, atropine effects, swelling of the gums, euphoria, depression and malaise. Respiratory depression and coma may occur with overdosage.

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are as follows:

Children:	*Total Daily Dosage*
3-6 mo.	½ tsp.* t.i.d. (3 mg.)
6-12 mo	½ tsp. q.i.d. (4 mg.)
1-2 yr.	½ tsp. 5 times daily (5 mg.)
2-5 yr.	1 tsp. t.i.d. (6 mg.)
5-8 yr.	1 tsp. q.i.d. (8 mg.)
8-12 yr	1 tsp. 5 times daily (10 mg.)
Adults:	2 tsp. 5 times daily (20 mg.) or 2 tablets q.i.d.

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

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this ulcer did not heal...until its surface was cleared of dead tissue and debris



FIRST APPLICATION
ELASE Ointment is applied to a deep ulceration of a finger

EIGHTEEN DAYS LATER
Healing has progressed rapidly without interruption or interference from any accumulated purulence or necrotic tissue. Greatly reduced size of lesion and minimal scar tissue indicate quality and vigor of healing which is almost complete.



to aid in debridement to facilitate healing in chronic cutaneous ulcers...

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PARKE-DAVIS

By helping to remove dead tissue and debris from the ulcer's surface, ELASE Ointment creates a better environment for the elimination of infection, for healthy granulation...*for healing.* Its lytic enzymes effectively break down DNA in dead leukocytes and other debris...the fibrin in blood clots, serum, and purulent exudates...and the denatured proteins in necrotic tissue. Protein elements of *living* tissue are relatively unaffected. ELASE Ointment is indicated in stasis ulcers and in other infected or inflamed ulcers caused by circulatory disturbances. In cases requiring skin grafting, it is used preoperatively for debridement. For ambulatory patients debridement with ELASE Ointment is a convenient therapy and a regimen likely to be followed. *Precautions:* Observe usual precautions against allergic reactions, particularly in persons with a history of sensitivity to materials of bovine origin or to mercury compounds. *Adverse Reactions:* Side effects attributable to the enzymes have not been a problem at the dose and for the indications recommended. *Discussion:* Successful use of enzymatic debridement depends on several factors: (1) dense, dry eschar, if present, should be removed surgically before enzymatic debridement is attempted; (2) the enzyme must be in constant contact with the substrate; (3) accumulated necrotic debris must be periodically removed; (4) the enzyme must be replenished at least once daily; and (5) secondary closure or skin grafting must be employed as soon as possible after optimal debridement has been attained. It is further essential that wound-dressing techniques be performed carefully under aseptic conditions and that appropriate systemically acting antibiotics be administered concomitantly if, in the opinion of the physician, they are indicated. *Available:* ELASE Ointment is supplied in 30-Gm. tubes containing 30 units (Loomis) of fibrinolysin and 20,000 units of desoxyribonuclease with 0.12 mg. thimerosal (mercury derivative); and in 10-Gm. tubes containing 10 units of fibrinolysin and 6,666 units of desoxyribonuclease with 0.04 mg. thimerosal. ELASE Ointment has a special base of liquid petrolatum and polyethylene; contains sodium chloride and sucrose used during manufacture; is stable at room temperature through the expiration date stated on the package.

Parke, Davis & Company, Detroit, Michigan 48232

PARKE-DAVIS

48168

Uniform Anatomical Gift Act

Sanford A. Mullen, M.D.

The 1969 Florida Legislature passed many bills that will affect the practice of medicine in our state. Other bills which would have produced significant changes in medical practice in Florida were rejected by the legislature. One bill of much interest to physicians passed with little or no controversy. This was the Uniform Anatomical Gift Act which gained quick approval by the legislature and became law without the governor's signature.

In the preamble of this law, the legislature stated that the Uniform Anatomical Gift Act was passed . . . "because of the rapid medical progress in the field of tissue and organ preservation, the transplantation of tissue and tissue culture, and because it is in the public interest to aid in the development of the field of medicine . . ." The act regulates only the gift of a body or parts of the body to be made after the death of a donor. According to the most recent available information, 37 states have passed laws of this type as of August 20, 1969.

The development of this law began in 1959 when there was a national conference on the legal environment of medical science co-sponsored by the National Society for Medical Research and the University of Chicago. This conference urged the establishment of appropriate committees to work toward the solution of existing conflicts and deficiencies in state laws so that there would be uniform laws to govern autopsy performance, tissue transplantations and body donations. The matter remained relatively dormant until it was brought into sharp focus by the first human heart transplant which was performed on December 3, 1967. It is fortunate that a committee under the sponsorship of the Commissioners on Uniform State Laws had been appointed in 1965 to study the problem and make recommendations to solve it. The report of the committee which became the model bill and was entitled the Uniform Anatomical Gift Act received final approval by the commission in July 1968 and was followed by the endorsement of the American Bar Association in August 1968. The American Medical Association gave formal approval to the model bill at its clinical meeting in December 1968. The speed with which bills based on the Uniform Anatomical Gift Act were passed by so many states attests to the excellence of the model bill.

The Florida law follows very closely the Uniform Anatomical Gift Act. The law gives any person 18 years of age or older the authority to donate all or a part of his body to an appropriate medical facility. The Florida law also includes a section establishing a plan for eye banks. There are elaborate precautions which insure the rights of the individual and his next of kin. The Uniform Anatomical Gift Act is an excellent legislative advancement. We should be proud that Florida was one of the earlier states enacting this law.

Dr. Mullen is chairman, Committee on State Legislation, Florida Medical Association.

▶ Dr. Mullen, P.O. Box 2921, Jacksonville 32203.

The Fall Meeting of the Board of Governors

Richard M. Fleming, M.D.

The October meeting of the FMA Board of Governors is always the most constructive and productive of all of its meetings. For some years now, as is well known by everyone, this meeting is held outside of the state of Florida with each member attending assuming his own transportation costs outside the state. This assures that those attending will spend two or three days together uninterrupted by the pressures of problems at home and will have ample time not only for the formal meetings but for informal and leisurely discussions of many of the problems our Association faces. These meetings have always proven most fruitful and this year's was certainly a vintage year! In addition to 100% attendance by the officers and Governors of the FMA and the chairmen of the various councils, there were representatives from the State Board of Health (now the Division of Health), the Department of Health and Rehabilitative Services, Blue Shield and Blue Cross, our attorneys in Jacksonville and Tallahassee, several past presidents and the Editor of the Journal.

This section will carry a report on the actions which took place at this meeting in two or three installments.

Probably the action of greatest interest was the adoption of a new format for the annual meeting. It had become increasingly clear that a change was necessary in both the scientific sessions and the meetings of the House of Delegates. Last year, upon recommendation of the Committee on Scientific Assemblies, specialty groups sponsored or co-sponsored the FMA scientific sections. The response was excellent and the Board of Governors voted to continue this format and provide $300 toward the expense of one guest speaker for each scientific section.

A radical change in the meetings of the House of Delegates was adopted in an effort to handle our work load more efficiently. The first meeting of the House will occur on Wednesday afternoon, thus allowing all day Thursday for reference committee meetings if the time is required. Starting times have been staggered to allow greater participation by more members. The second meeting will take place on Saturday afternoon at which time the reference committee reports are received and appropriate actions taken. This will leave Sunday morning free for awards, ceremonial duties and election of officers, all of which can be readily accomplished before noon. This should prove to be a welcome change in routine! The complete meeting schedule is available upon request to FMA headquarters and will be printed in a subsequent issue.

1970 Conference of County Medical Society Presidents and Secretaries

Richard M. Fleming, M.D.

Of great interest to all members of the Association is the meeting of the presidents and secretaries of county medical societies in Orlando on Saturday, January 31. The complete program was approved by the Board of Governors with the highest commendation, so timely are the subjects being discussed. Among the topics are "Hospital Relations (Florida Joint Commission, Suits, Incorporation of Medical Staffs, Model By-Laws)" presented by Vernon B. Astler, chairman FMA Committee on Hospitals and Extended Care Facilities, and "Legislative Program" by Sanford Mullen, chairman, FMA Committee on State Legislation.

At a luncheon meeting we will have the privilege of hearing an address by Ernest B. Howard, executive vice-president of the AMA, who will speak on "The National Medical Scene."

Presentations by Granville Larimore, director of the Florida Regional Medical Program; James Bax, the recently appointed secretary of the new Department of Health and Rehabilitative Services of Florida, and a discussion on "Peer Utilization Review" led by Phil Hampton and Joe Stansell, are on the afternoon agenda. Sunday morning, February 1, will be devoted to a seminar on state legislation in which our members as well as our attorneys and other personnel who are working on the legislative program will participate.

The purpose of this initial "call" is to alert the members to the fact that this meeting is not only open to *all* members of the FMA (not just presidents and secretaries as the name implies) but is of such importance that as many members as possible should plan now to attend.

More about this and the Board of Governors meeting next month!

Watch Your Thanks

In 1949 a young, rather serious college graduate joined the staff of the Florida Medical Association. On October 1, 1969, 20 years later, the current members of the Board of Governors chipped in to purchase a Rolex Oyster Perpetual date wristwatch to celebrate this anniversary. In a crowded, friendly room in Nassau, Henry Babers and Jack Cleveland made the presentation. If you had seen the surprise, dismay and deep appreciation on Harold's face, you would better understand why he was speechless for probably the first time in his life.

This priceless poem is anonymous.—Ed.

Executive Vice President, Harold Parham

We're all amazed, in this land of plenty,
That the number of years is exactly twenty
That Harold has had us and guided our thinking—
Otherwise our ship would be sinking.

We can't have words of appreciation
To him, and Mary, his closest relation
But we can tell him in poem and rhyme
That we hope the gift keeps adequate time.

We'll always love them—we always have.
He heals our wounds like a potent salve.
A very weak symbol of our regard—
We hope you get a heavenly reward.

A Medical Flashback

William M. Straight, M.D.

The bell jangled, the night orderly scurried to swing the door, and in tramped four soldiers carrying injured Jesus Lopez on an improvised litter. Earlier that day Jesus had been part of a crew felling trees on the east bank of the St. Johns River. His attention momentarily diverted, he was caught and crushed under a falling tree. His comrades rushed to lift the tree off his chest to ease his breathing, loosened his clothing and coaxed him back to consciousness. A quick survey showed a badly twisted left forearm and a bone projecting through the skin and his torn, blood-soaked sleeve. Each breath Jesus took brought forth a groan and a grimace of pain. After giving him several swallows of wine, the sergeant in charge of the work detail stanched the flow of blood with strips torn from a shirt, straightened the forearm and bound it to a short length of sapling. A litter was fashioned from a blanket and two more saplings, the patient was carefully lifted onto it, and he was taken to the dispensary at Picolata. The medical aide there, having briefly examined the wound, ordered Jesus to be taken to the hospital at St. Augustine without delay.

Thus began the longest and most painful day in Jesus' life. The hours of painful jostling, the sickening swinging of the litter, the stifling dust, the sweltering heat, the hordes of mosquitoes assaulting his exposed skin, and the swarms of flies attracted to his blood-soaked bandage left him exhausted. But he had survived the trip and the security of the hospital walls now enveloped him.

A messenger was dispatched with a lantern to fetch Don Andres de Ben, the assistant in surgery, who lived but a street or two away. When Ben arrived he found his patient lying on the wooden table in the small surgery just off the foyer. Ben immediately ordered 25 drops of Sydenham's laudanum and when Jesus seemed more comfortable, he carefully removed the crude bandages and splint and cut away Jesus' blood-soaked shirt. Inspection showed a compound fracture with considerable destruction of tissue. In view of the gravity of the situation, Ben sent the messenger to summon his chief, Don Juan José Bousquet. While awaiting Bousquet's arrival, Ben carefully sponged the wound with a marine sponge and warm water. This removed much of the clotted blood, sand and fragments of bone, bark and leaf.

Upon Bousquet's arrival he and Ben debated whether to amputate the arm or to try to save it as some modern surgeons were advocating. They decided on the latter course and he instructed Ben to maintain traction on the left hand in an attempt to pull the projecting bone into place. However, no amount of traction could quite get the tip of the bone below the skin. After placing a lead shield between the projecting bone and the skin, Bousquet sawed off the centimeter of bone which could not be pulled below the skin's surface. Now with traction the arm could be put into a fairly normal position with the hand semi-pronated. The wound was covered with a pledget of soft lint soaked in an emollient ointment and

Dr. Straight is chairman, Committee on Archives, Florida Medical Association.

the arm bound to a pasteboard splint in such a way as to maintain traction and at the same time permit the wound to be observed and dressed daily. Bousquet then turned his attention to Jesus' chest pain and after an examination concluded that it was due to one or more fractured ribs. He applied a wide adhesive plaster in the region of the pain with perceptible comfort for Jesus. Bousquet instructed Ben to withdraw a pint of blood immediately to ameliorate the inflammatory reaction and then departed. The phlebotomy accomplished without difficulty, Jesus was dressed in a long nightgown and carried to the enlisted men's quarters where he was placed on a long wooden platform covered with a straw mat that he was to share as a bed with three other soldiers.



Fig. 1.—Enlisted men's ward, Spanish Military Hospital, St. Augustine, Florida.

Of the next several days Jesus had but a vague memory but he did recall being awakened each morning at four to prepare for the rounds of the physicians, Ben, Bousquet, and Don Thomas Travers at five. He recalled a vein in the right forearm opened with a knife twice more to let blood. But most of all he recalled the foul-smelling, greenish-yellow pus that appeared in his wound about the third day after his accident. The sight and smell of it nauseated him but the surgeons insisted it was necessary. Indeed, Travers felt it was not coming in sufficient quantity to prevent mortification so he probed the wound with his finger and inserted a piece of tow to encourage the flow of what he called "laudable pus." Each day the wound was redressed with soft lint dipped in lead acetate solution and by mouth he was given liberal doses of Peruvian bark. Gradually his fever abated, the drainage decreased, and the arm became stronger and finally the sore healed over. Although his arm was slightly bent and he couldn't turn and twist the hand as freely as before, he had a serviceable arm and hand.

The hospital to which Jesus was taken was the successor to several hospitals beginning with a thatched lean-to against the wall of the Hermita de Neustra Senora de La Soledad in 1597. Fires, pestilence, and the ravages of time had caused the hospital to be moved and rebuilt time and time again. The hospital of Jesus' day had started life as a stable which was purchased and remodeled into living quarters by a Scottish carpenter, William Watson, during the British occupation of St. Augustine (1763-1783). As Watson's fortunes improved, he built another dwelling a few doors away and his former house became a convalescent home. In 1791 the Spanish government bought the convalescent home and converted it into a military hospital.

Although the original building that housed Jesus and echoed with the footsteps of Travers, Bousquet, and Ben has crumbled with the passing of the years, the St. Augustine Historical Restoration and Preservation Commission has rebuilt an exact replica on the original foundation on Aviles Street just off the town plaza. Contributions from the Florida Medical Association, several county medical societies, individual doctors and others have permitted "peopling" the hospital with life-sized mannequins dressed to represent the surgeon,



Fig. 2.—Spanish Military Hospital, St. Augustine, Florida.

his assistant, the apothecary, and patients. Now perhaps the more imaginative of tourists can hear the thud of soldiers' boots as they enter with their hapless patient or picture Travers, Bousquet and Ben moving from patient to patient making rounds by flickering candlelight on a morning nearly 200 years ago.

On September 10, 1969, a formal dedication ceremony marked the "opening" of the hospital to the public. Your Association was represented by our President, Dr. Henry J. Babers, our past President, Dr. W. Dean Steward, and the chairman of our Museum Committee, Dr. James J. DeVito.

Although we may be proud of the part we have played in this project thus far, the job is not yet done. There remains our plan for a pictorial museum of Florida medical history on the second floor of the hospital. Initially this will consist of a series of murals depicting significant medical events in Florida's past. Later we hope to replace the murals with artfully executed dioramas. When the dioramas are completed, the murals will travel the state for exhibition in the public schools. Join us in this project by making annual contributions to the Spanish Military Hospital and Florida Medical Museum. Checks made payable to the Florida Medical Foundation, P. O. Box 2411, Jacksonville, Florida 32203, earmarked for the Spanish Military Hospital and Florida Medical Museum, are tax deductible.



Fig. 3.—Left to right: Dr. James J. DeVito of St. Augustine, chairman of the FMA Hospital and Museum Committee, Dr. Henry J. Babers, president of Florida Medical Association, and Bradley G. Brewer, director of St. Augustine Historical Restoration and Preservation Commission. Dr. DeVito cuts ribbon, officially opening the Spanish Military Hospital in St. Augustine, Florida.

Although the event depicted in this sketch and the name Jesus Lopez are fictitious, the names of the surgeons and the techniques used are thought to be historically accurate for the period of about 1790-1800. Thomas Travers, physician-in-chief of the Spanish Military Hospital during this period, had a library including 57 medical titles. We are indebted to Mr. Luis Arana, historian and Spanish paleographer, for discovering and translating the inventory of Travers' library. The authors are such eminent men as Sydenham, Lind, Boerhaave and Cullen. Thus it seems likely that enlightened medicine was practiced at the Spanish Military Hospital at that period.

Dr. Straight, 550 Brickell Avenue, Miami 33131.

FMA Announces New Insurance Program for Members

Floyd K. Hurt, M.D.

A complete package of group insurance featuring Blue Shield-Blue Cross Master Medical and Life and Accidental Death and Dismemberment is now available to all FMA members and their employees, with coverage scheduled to begin January 1, 1970. Blue Shield and Blue Cross will, of course, underwrite the health portions and American Bankers Life Assurance Company, headquartered in Miami, will underwrite the life portions of the program through arrangements with the Florida Combined Insurance Agency, Inc.

The announcement of this special program followed the approval of an Association insurance trust agreement by the Board of Governors at its October 4, 1969, meeting.

In reviewing the program, Association President Henry J. Babers Jr., M.D., praised the Board for its action and called the program "one of the finest packages of protection available today." He pointed to such features as the $50,000 Master Medical, Paid-In-Full features of both Blue Shield and Blue Cross, and the $25,000 Life and AD&D, and the fact that members' employees, regardless of their number, are eligible for coverage.

Dr. Hurt is secretary-treasurer, Florida Medical Association.



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As designed by the Board, the Association program actually features two options, a High and Low, from which members may choose. The High Option provides, in addition, Blue Shield Usual and Customary, Blue Cross semi-private room and hospital ancillaries paid in full for 70 days and up to $50,000 in Master Medical benefits. The Low Option features the Blue Shield "A" contract with a $417.00 surgical maximum, Blue Cross with $25.00 a day for 31 days and ancillaries paid in full, and up to $20,000 in Master Medical benefits. Both options contain the $25,000 maximum life and AD&D—with no medical checkup required.

In approving this program for Association members, the Board took into consideration that many members already have some coverage through their local medical society groups. Special arrangements are being made to work closely with the societies to facilitate the changing over of members who wish to do so. It is expected that most doctors will want to make the change in order to take advantage of the higher benefits and the opportunity to provide coverage for their employees through a group program.

A mailing outlining the program in more detail is being made to each member. In addition, members may arrange for a representative of Blue Shield-Blue Cross to meet with them for further explanation by completing and returning the special coupon in the advertisement which appears on the opposite page. □

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Idling of Summer Days Far Behind

Marion S. Gilliland
(Mrs. C. H.)

This time of year the Auxiliary machine is settling down to a steady hum. The idling of summer days is far behind, and those most important fall months just past have set the course and warmed the engine.

Early in the fall local auxiliaries roll out the welcome mat for new and prospective members. An effort is made to determine their talents and interests and acquaint them not only with other members but also with Auxiliary policies and projects under way.

The state leadership, an intermediary link between the national officers and chairmen and their counterparts on the county level, has been getting educated by national leaders and preparing to pass this knowledge along. The main instrument for this is the annual Fall Board Meeting and Conference. Attending are the state officers, chairman of various committees and directors, district chairmen, county officers and chairmen, and we always hope a large sprinkling of members who hold no office.

The president and president-elect attended the power-packed three-day National Fall Board Meeting and Conference in Chicago in October. Dr. Gerald Dorman, president of the AMA, gave the keynote address. Other featured speakers included Dr. Ernest B. Howard, executive vice president of the AMA; Howard A. Schneider, Ph.D., member and head of the Experimental Medical Ecology Department of the Institute of Biomedical Research, and the Honorable Robert Packwood, U.S. senator from Oregon, who addressed the session sponsored by the AMA Public Affairs Division and AMPAC. There is always one session oriented around legislation and medical politics.

The national officers and chairmen presented a wealth of information and ideas, as well as suggestions for implementing those ideas. The conference ended with a tour of the AMA headquarters.

Usually about a week later, the president, president-elect, sometimes the first vice president, and selected key chairmen attend the Southern Regional Workshop, this year in Dallas, where important programs and policies are presented in detail, and where key national leaders are available to answer questions of specific importance to Florida's Auxiliary. This year Mrs. Wesley Nock, first vice president and membership chairman; Mrs. William Harrison, health careers chairman; Mrs. Robert Webster, AMA-ERF chairman, and Mrs. James Brandon, chairman for children and youth, attended sessions with their national and regional counterparts and learned better ways to carry out the projects and programs of their respective committees. The president and president-elect covered a wide range of topics geared to providing better leadership.

The state Fall Board Meeting and Conference begins with a meeting of the Executive Committee, attended by all officers and directors of the Auxiliary as well as the President of the Florida Medical Association; Mr. Harold Parham, Executive Vice President, and the chairman of the Advisory Committee to the Auxiliary. Later the same day there are meetings of key committees such as By-Laws and Nominating. Early arrivals with no evening meetings find friends and fellowship in the hospitality room, manned this year by the Alachua County auxiliary, hosts to the conference.

During the next two days county presidents meet with the state president, county presidents-

(Continued on page 935)

Mrs. Gilliland is president, Woman's Auxiliary to the Florida Medical Association.

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Adverse Reactions: *Central Nervous System*—Drowsiness, especially with large doses, early in treatment; infrequently, pseudoparkinsonism and other extrapyramidal symptoms; nocturnal confusion, hyperactivity, lethargy, psychotic reactions, restlessness, and headache. *Autonomic Nervous System*—Dryness of mouth, blurred vision, constipation, nausea, vomiting, diarrhea, nasal stuffiness, and pallor. *Endocrine System*—Galactorrhea, breast engorgement, amenorrhea, inhibition of ejaculation, and peripheral edema. *Skin*—Dermatitis and skin eruptions of the urticarial type, photosensitivity. *Cardiovascular System*—Changes in the terminal portion of the electrocardiogram have been observed in some patients receiving the phenothiazine tranquilizers, including Mellaril (thioridazine). While there is no evidence at present that these changes are in any way precursors of any significant disturbance of cardiac rhythm, several sudden and unexpected deaths apparently due to cardiac arrest have occurred in patients previously showing electrocardiographic changes. The use of periodic electrocardiograms has been proposed but would appear to be of questionable value as a predictive device. *Other*—A single case described as parotid swelling.

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elect with the state president-elect, and county chairmen with their respective state and district chairmen. At these sessions the state leaders pass along the new ideas and information gleaned from national, supplemented by their own good ideas tailored to Florida's needs. County leaders have an opportunity to help solve their local problems by drawing on the information and resources of state leaders and by exchanging ideas with other counties. And, very importantly, state leaders have an opportunity to gather ideas and suggestions from the county level. This is the origin of many of the best ideas for, after all, this is the level at which all Auxiliary programs are finally carried out.

Part of one morning is taken up with the business session of the Fall Board Meeting. Sometimes at this session the group is addressed by the President of the FMA. This year, Dr. Babers brought this message to us at the "Getting to Know You" luncheon which followed the business meeting. Everyone left this luncheon knowing new things about old friends as well as knowing new friends. More cement for those good relations among the families of physicians!

Demonstrations are often an important part of the conference. During one afternoon this year we taught your wives a few tricks about protecting themselves from attack at home and away. Captain Courtney Roberts of the Gainesville Police Department has been teaching a course in personal self-defense for women in Gainesville for the past few years and this year, through the Auxiliary, we are helping to make it possible to bring this instruction to all areas of the state. Along with this two-hour demonstration of simple means of self-protection, Auxiliary members received information on setting up such a program in their own localities. With the present high incidence of assault on women, this instruction is vital to their safety. Your wives are, however, urged not to practice on you. Such techniques are not meant for playful pastime, only for protection in time of need.

For the past few years the International Health Activities Committee has sponsored a bazaar in conjunction with this conference. All members are urged to bring or send articles of arts and crafts for sale to other members. The proceeds are used to further the projects of the committee, such as sending supplies and instruments, radio equipment or texts to foreign areas of such needs or to help sponsor the ship Hope on its rounds of mercy. During breaks in the proceedings members are urged to shop the IHA bazaar for Christmas gifts. Unique and lovely things are always available, ample evidence of the many and varied talents of Auxiliary members.

Strategic use is made of the interval between the end of the general sessions and the evening's festivities. The finance committee meets to cast a watchful eye on the budget, and various officers and chairmen are available for individual conferences with all comers. This helps to solve problems which are difficult to approach in a group situation. Sometimes films are available for preview, such as a drug abuse film which was shown this year.

One evening there is a purely social hour, usually shared by the husbands of the host auxiliary, another excellent opportunity to improve those all-important good relations. This year, during the dinner which followed, we reached one of the high points of the conference. We were indeed privileged to hear an address by Florida's own Dr. Edward Annis, one of the most articulate voices of American medicine.

Additional conferences are held on the last day of the conference, and gems from the individual sessions are reported to the general assembly. At the final session this year, Dr. Sanford Mullen and members of his committee of the Florida Medical Association presented the legislative program of the FMA and told what part the Auxiliary might play in carrying it through.

And last, but far from least, one of the most strategic of all Auxiliary committees met after the general conference adjourned. For several years the Auxiliary has had a committee called Structure Review. It used to be called Long Range Planning. It is the job of this committee to analyze and evaluate programs and procedures and to make suggestions for facilitating the business of the Auxiliary. This committee met in joint session with the FMA's Advisory Committee to the Auxiliary. This was a first, and we look for great things to come from this meeting. In all Auxiliary endeavors, great emphasis is placed upon surveying the needs of the community and then striving to fill those needs, and, when feasible, doing so in cooperation with other community agencies or organizations with common interests and goals. And always, it is stressed that the auxiliaries must work in cooperation with and full approval of their corresponding medical association.

▶ Mrs. Gilliland, 324 N. W. 24th Street, Gainesville 32601.

Dialogue

Spontaneous comment by readers is invited. Choice of subject and manner of treatment is an individual matter for each contribution. The ideas, opinions or statements are those of the individual who is writing and are not meant to reflect the attitude of the Florida Medical Association, its officers or its publication. Each one is invited to express himself on a subject close to him. Acceptance of material will be based on space, appropriateness and good taste according to our best judgment.—Ed.

Whither Medical Student? or Wither Medicine!

Harry E. Beller, M.D.

There is more than a generation or technological gap between the medical student and the practicing physician today. The telescopic view of medicine can be limited to the remarkable scientific advances of immunology, chemotherapy, organ transplantation, and technically exhilarating surgical procedures. What the entire visual field of society means is neither taught in medical school nor inspired by existing medical organizations. Thus the AMA has regarded the SMA as a mini-skirted reflection of its own philosophy, much as general surgery thought of pediatric surgery as smaller incisions with smaller instruments.

Medicine is not an island. Its practice is determined to the largest extent by the attitude of society towards the human body and by the valuation of health and disease. It differed, therefore, in different periods of history, determined by the structure of the society at the time. The physicians of Babylonia were priests, since this civilization was of a religious character, and all sciences were a part of theology. The Greek physician was a craftsman, accepting the hedonistic philosophy that health was the highest good and disease a curse because it removed man from the pleasures of life. The Judao-Christian impact upon medicine was its emphasis on healing the sick, the infirm, the crippled, and thus receiving divine sanctification.

The condemnation of the Nazi medical organizations for their failure to oppose "experimentation" on human beings is significant today in applying this humanitarian yardstick to our profession and its attitude to chemical and biological weapons. Or in the criticism of the Vietnam war, cuts in health and welfare programs, inflation and its effect on health.

This is a basic void in the curriculum of medical schools. Medicine is part of the social organism, not a power unto itself unrestricted, dressing itself in the commercial illusion of "free enterprise." Nor is it enough to accept the bogeyman of socialism without a basic understanding of the history of philosophy and social science and their influence upon medicine. Medical education requires that the interpretation of socio-political change is as necessary as the x-ray, the electrocardiogram, or the chemical profile.

October 21, 1969

Community Health Committee
Senior Class
University of Miami School of Medicine
P.O. Box 19
Little River Station
Miami, Florida 33138

Dear Young Doctors:

We heard you speak about your desire to reach out and help your fellow man. We heard you tell of people you have found in need of medical care. You told of people, 16,000 of them, who were actually unaware of the benefits of modern medicine. You said the only ones you could get to help you reach these underprivileged people were the few VISTA volunteers in the area. You started a night clinic. You donated your time. You told us more could be done but you could find no solid, local organization to help you.

Many of us would like to join with you but we have our reservations. They are probably rationalizations. Why have we not gone to these needy people in the direct way you have? Some of us deny your people really need medical care. We say you may have manufactured a social need but mostly we know that it is really there. For some reason we have been blinded to it. We rationalize and say, "Your patients need a cultural change, then good medical care will follow automatically. It is a social problem beyond the ability of mere doctors to correct. These people, if offered good medicine, would probably refuse it."

You have touched us with your humanity while we have tried to touch you with simple medical schooling. You who are "almost doctors" have challenged us, who are "almost citizens." You make your case against the establishment. You do this not by violence or agitation but by merely holding up a standard. Your example is truly a step to a better world and if publicized enough can be a strong force toward building that better world. Your example of community concern is the best case against the contemporary revolutionist who carries the facade of concern but whose immediate aim is destruction. Your work is also the strongest case against an establishment impaired by custom. It is a case against an establishment blinded by naive rationalizations.

You have forced us to ask a philosophic question. Is the physician no more than a product of his culture, a product simply to be hired back to meet the culture's medicinal needs? Can the physician transcend this limited role, use his precious ability and education and chart the pathways to better worlds?

We doctors who are almost citizens salute you citizens who are almost doctors.

Sincerely,

Jim C. Hirschman, M.D.

Representative of the Concerned Establishment

Miami

P.S.—We hope you get the equipment you seek to better outfit your clinic in Perrine, Florida. We hope that the University of Miami School of Medicine continues to permit you to serve your community's social needs.

Dear Editor:

Your editorial on "Death—A Concept to Reconsider" (Florida Medical Journal, October 1969) is exceptionally comprehensive in nature. Your power to focus ideas with words is refreshing. You have set forth the physician's role with humility and honest reality.

Some turn-signals and flashers come on in my mind. I would question that "The concept of death must have been sharp and clear to early man." I do not know the conclusion of anthropologists at this point. Within the 6,000 year span of ideas recorded in the Bible (rather late ideas as compared to the long evolutionary span), the following appear as concepts of Death:

(1) The normal end of life. Some portions of the Old Testament reflect views beyond 6,000 years. But this view is found in both ancient and more recent parts of the Old Testament.

Life, like fruit, ripens and is plucked at harvest. (Job 5:26, Genesis 15:15, Judges 8:32, etc.) Such a view would not be too concerned with what follows death. There are Old Testament texts that imply that the end of life is the end of all existence. Gradually, a shadowy existence in SHEOL was believed. It was an unproved place in the bowels of the earth. Sepulchers were developed to keep the dead from taking revenge and upsetting the equilibrium between the living and the dead.

(2) As life became more hazardous and death came in the prime of life, the Hebrews had to work out an answer. In your article, Paragraph 2, you write: "Death became the enemy of life." If "death and life belong to each other," then I would have used the word "opposite" of life rather than "enemy" of life, but the Jesus-event in history clearly considers death as the "*Last* enemy to be conquered." A theology of death as caused by the disobedience of Adam and Eve was developed by the church and early church "fathers."

(3) Breath and life were equated. The "J" tradition in Genesis 2 records "and breathed into his nostrils the breath of life" (Gen. 2:7). One authority states: "No biblical text authorizes the statement that the "soul" is separated from the body at the moment of death." (The Interpreter's Dictionary of the Bible, Vol. 1, page 802).

One conclusion was that a person separated from the world of the living by death became impure. (This will be found in some forms of Judaism today).

Thus, a premature death came to be considered punishment directed from a hostile power in or behind nature.

Concepts of other civilizations became involved in the Biblical struggle to interpret death. The dichotomy of "Soul" and "Body" is more Babylonian and Greek in origin. The definition of death as the separation of the soul from the body would not be real or pragmatic for a physician.

A burden of concern in your editorial focuses on the conflict that exists between the medical concept of death and concepts developed by custom, society, law, etc. You state that "Death is the ultimate change in life" and I take it you mean by ultimate, also final. Life as an unexplainable illusion has had its moment on the screen of imagination and consciousness.

If I were to be bold enough to push for a conclusion to an unresolved "riddle" of Life and Death, I would try to establish the physicians' category in the *quantitative* and any and all interpretations, value judgments, philosophies and religions in the *qualitative*. This, then, would mean that only the science of physical medicine could clearly announce when "legal life ends" (your term). I believe that society acknowledges this by requiring a doctor's signature on a death certificate.

I recall military situations in battle when the Roman Catholic Church would request delay of the "announcement" of death until proper Last Rites could be administered. This could be quite a time span from the physical medicine legality. From the qualitative point of view "when" cannot be pronounced. It is accepted as a responsible decision of physical medicine. Then, it is the calling of the church, theologian, and philosopher to proclaim the triumph of life over death and to put this into communicable concepts.

Lee R. VanSickle, Minister
Bryan Memorial United Methodist Church
Miami

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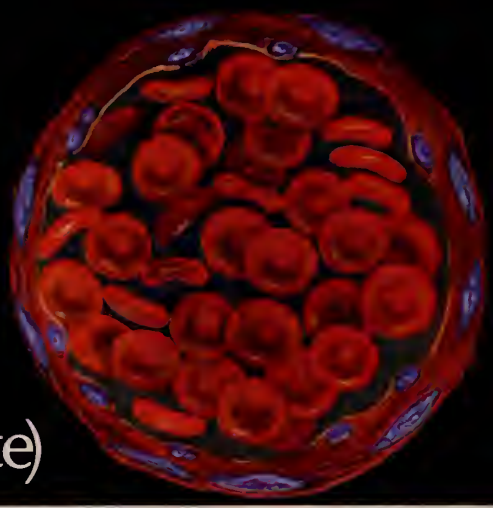
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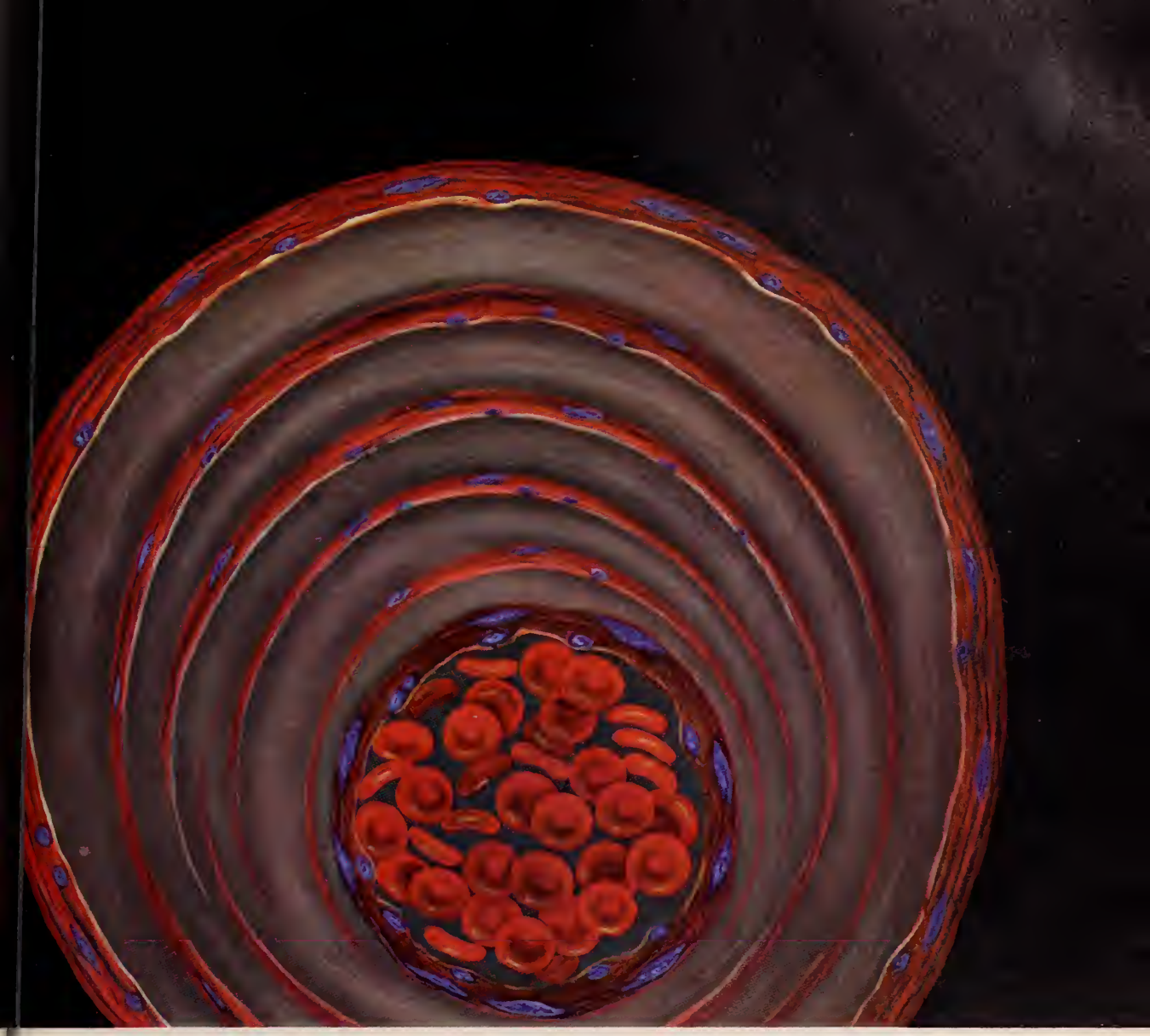
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Contraindications: Known hypersensitivity to either agent constitutes a contraindication to the use of this drug. Isoproterenol preparations are generally contraindicated in patients with pre-existing cardiac arrhythmias associated with tachycardia because the cardiac stimulant effect of the drug may aggravate such disorders.

Warnings: Excessive use of an adrenergic aerosol should be discouraged, as it may lose its effectiveness. Occasional patients have been reported to develop severe paradoxical airway resistance with repeated, excessive use of isoproterenol inhalation preparations. The cause of this refractory state is unknown. It is advisable that in such instances the use of this preparation be discontinued immediately and alternative therapy instituted, since in the reported cases the patients did not respond to other forms of therapy until the drug was withdrawn.

Deaths have been reported following excessive use of isoproterenol inhalation preparations and the exact cause is unknown. Cardiac arrest was noted in several instances.

Precautions: Isoproterenol should not be administered with epinephrine, since both drugs are direct cardiac stimulants and their combined effects may produce serious arrhythmias. If desired, these drugs may be alternated, provided an interval of at least four hours has elapsed. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Duo-Medihaler should be used with caution in patients with cardiovascular disorders including coronary insufficiency, diabetes or hyperthyroidism, and in persons sensitive to sympathomimetic amines.

Adverse Reactions: Overdosage with isoproterenol can produce palpitation, tachycardia, tremulousness, flushing, anginal-type pain, nausea, dizziness, weakness and sweating, while overdosage with phenylephrine can induce cardiac irregularities, central nervous system disturbances and reflex bradycardia.

Dosage and Administration: The recommended dose for the relief of dyspnea in the acute episode is 1 to 2 inhalations. Start with one inhalation. If no relief is evident after 2 to 5 minutes, a second inhalation may be taken. For daily maintenance, use 1 to 2 inhalations 4 to 6 times daily or as directed by the physician. No more than two inhalations should be taken at any one time, nor more than 8 inhalations per hour, unless advised by the physician.

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Warnings: See above. Do not exceed the dose prescribed by your physician. If difficulty in breathing persists, contact your physician immediately.

Precautions: Isoproterenol and epinephrine should not be used concurrently; combined effects may cause serious arrythmias. Their use may be alternated if an interval of at least four hours has elapsed. As with all sympathomimetic drugs, isoproterenol should be used with great caution in the presence of cardiovascular disorders, including coronary insufficiency, or when there is a sensitivity to sympathomimetic amines. Although there has been no evidence of teratogenic effects, use of any drug in pregnancy, lactation, or in women of childbearing age requires that the potential benefit of the drug be weighed against its possible hazard to the mother and child.

Adverse Reactions: Only a small percentage of patients experience any side effects following oral inhalation of aerosolized isoproterenol. Overdosage may produce tachycardia with resultant coronary insufficiency, palpitations, vertigo, nausea, tremors, headache, insomnia, central excitation, and blood pressure changes. These reactions are similar to those produced by other sympathomimetic agents.

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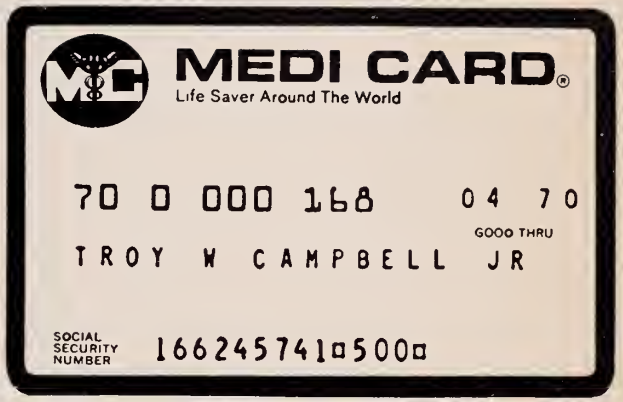
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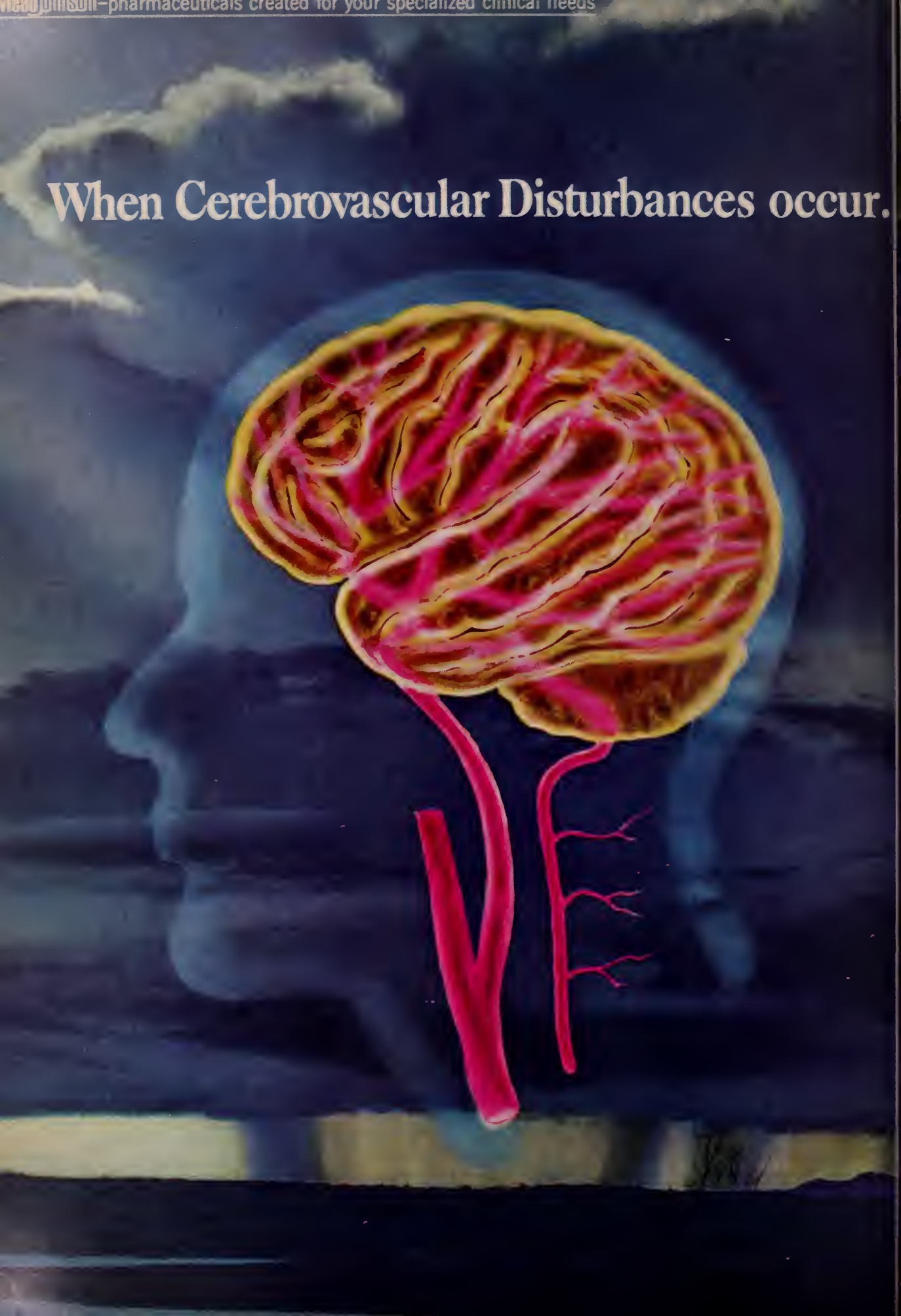
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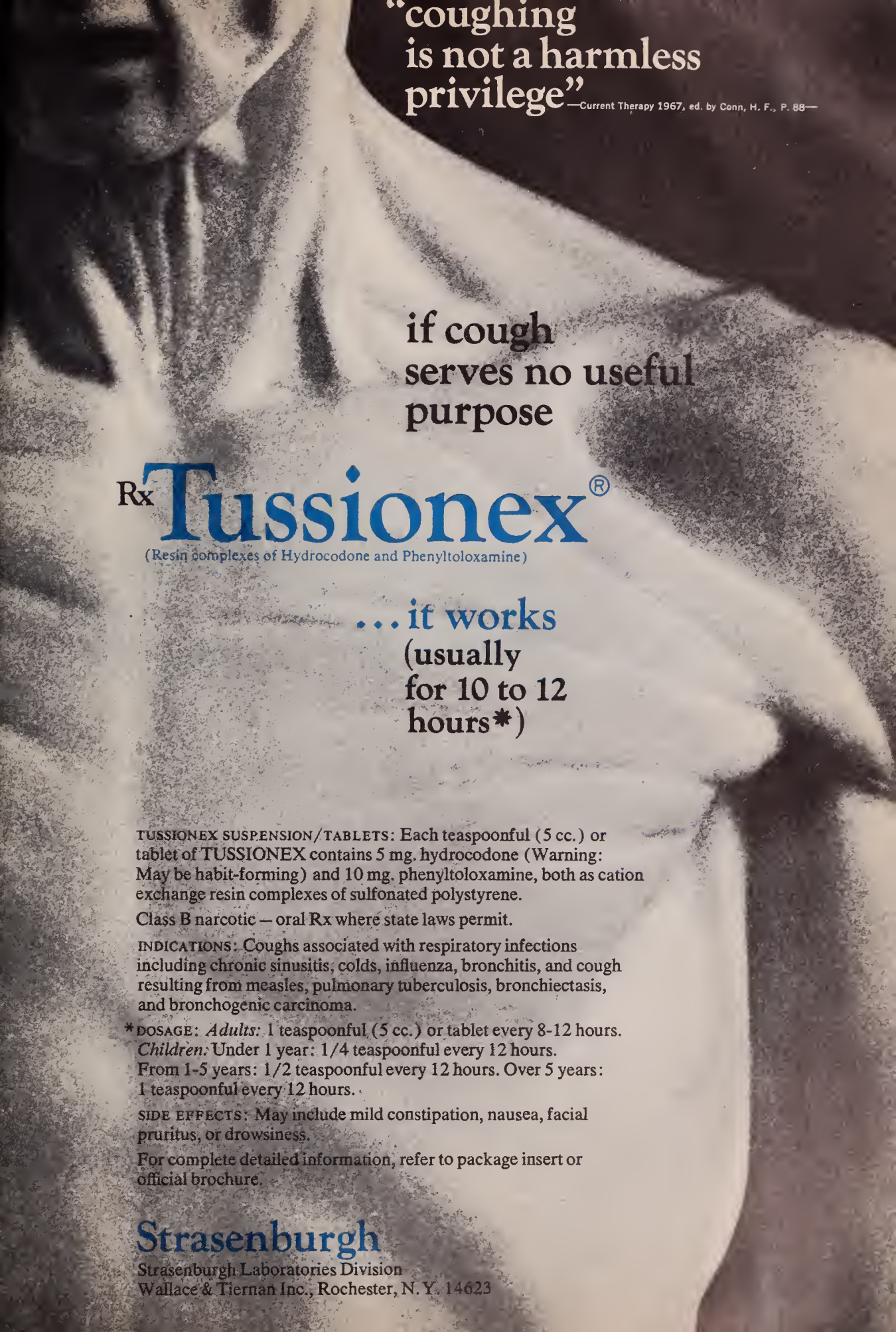
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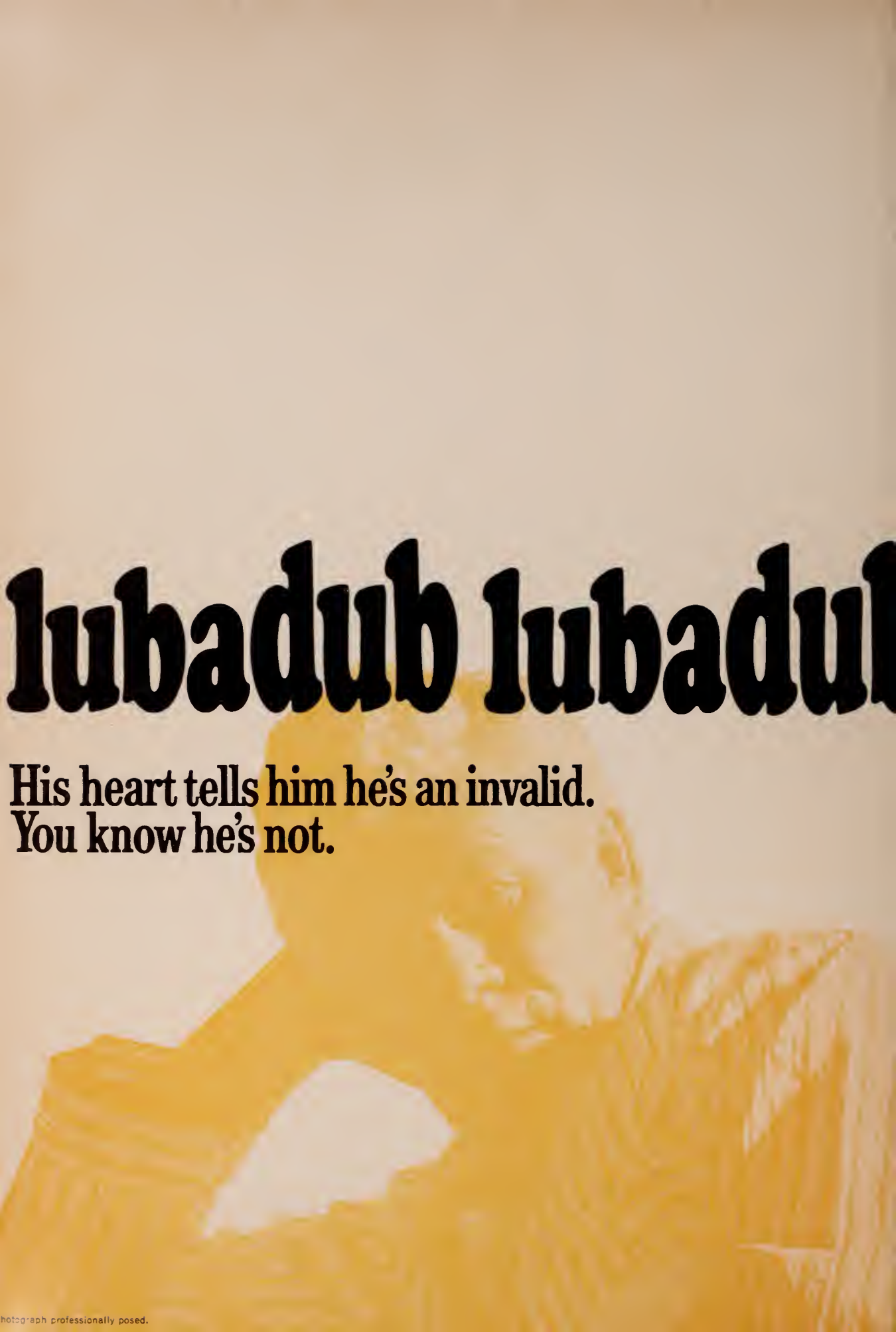
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Side Effects include drowsiness, usually transient; if persistent and associated with ataxia, usually responds to dose reduction; occasionally concomitant CNS stimulants (amphetamine, mephentermine sulfate) are desirable. Allergic or idiosyncratic reactions are rare, but such reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Previous history of allergy may or may not be related to incidence of reactions. Mild reactions are characterized by itchy urticarial or erythematous maculopapular rash, generalized or confined to groin. Acute nonthrombocytopenic purpura with cutaneous petechiae, ecchymoses, peripheral edema and fever have been reported. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis,

badubdub lubadu

xiety is expected in the cardiovascular patient.
ittle may even be desirable.

t when anxiety is exaggerated . . . when it
erferes with sleep . . . when it aggravates
rdiovascular symptoms, your help may
needed.

turally, you'll want to reassure the patient.

d perhaps prescribe Equanil (meprobamate)
adjunctive therapy. It helps relieve anxiety
d tension specifically, yet gently.

most 15 years' use has shown that Equanil
usually well tolerated as well as effective.
de effects are generally limited to transient
owsiness; serious, therapy-interrupting
de effects are rare.

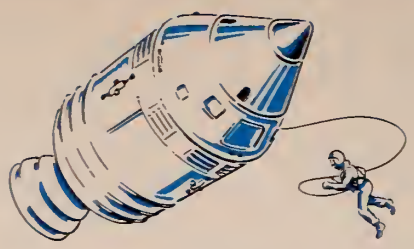
stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically as with epinephrine, antihistamine and possibly hydrocortisone. Aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia have occurred rarely, almost always in presence of known toxic agents. A few cases of leukopenia usually transient, have been reported on continuous administration.

Meprobamate may sometimes precipitate grand mal attacks in patients susceptible to both grand and petit mal. Extremely large doses can produce rhythmic fast activity in the cortical pattern. Impairment of accommodation and visual acuity has been reported rarely. After excessive dosage for weeks or months, withdraw gradually (1 or 2 weeks) to avoid recurrence of pretreatment symptoms (insomnia, severe anxiety, anorexia). Abrupt discontinuance of excessive doses has sometimes resulted in vomiting, ataxia, tremors, muscle twitching and epileptiform seizures. Prescribe very cautiously and in small amounts for patients with suicidal tendencies. Suicidal attempts have resulted in coma, shock, vasomotor and respiratory collapse and anuria. Excessive doses have resulted in prompt sleep; reduction of blood pressure, pulse and respiratory rates to basal levels; and occasionally hyperventilation. Treat with immediate gastric lavage and appropriate symptomatic therapy. (CNS stimulants and pressor amines as indicated.) Doses above 2400 mg./day are not recommended.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. (All tablets also available in REDIPAK® [strip pack], Wyeth.) Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories Philadelphia, Pa.

Equanil®
(meprobamate) Wyeth®



Man in space, now fait accompli, re-emphasizes the importance of Uro-Phosphate therapy. Research into the effect of space travel on the astronaut reveals that weightlessness causes loss of bone calcium. As the bones are required to bear less and less of the weight of the body they lose calcium, increasing the calcium content of the urine. When physical activity is reduced, the acidity of the urine should be adjusted to keep increased calcium in solution . . . . a prophylaxis to prevent kidney or bladder calculi.

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NOW A SUGAR-COATED TABLET

Each tablet contains: METHENAMINE, *300 mg.;* SODIUM ACID PHOSPHATE, *500 mg.*

Uro-Phosphate gives comfort and protection when inactivity causes discomfort in the urinary function. It keeps calcium in solution, preventing calculi; it maintains clear, acid, sterile urine; it encourages complete voiding and lessens frequency when residual urine is present.

Uro-Phosphate contains sodium acid phosphate, a natural urinary acidifier. This component is fortified with methenamine which is inert until it reaches the acid urinary bladder. In this environment it releases a mild antiseptic keeping the urine sterile.

Uro-Phosphate is safe for continuous use. There are no contra-indications other than acidosis. It can be given in sufficient amount to keep the urine clear, acid and sterile. A heavy sugar coating protects its potency.

Dosage:

For protection of the inactive patient 1 or 2 tablets every 4 to 6 hours is usually sufficient to keep the urine clear, acid and sterile.

2 tablets on retiring will keep residual urine acid and sterile, contributing to comfort and rest.

A clinical supply will be sent to physicians and hospitals on request.

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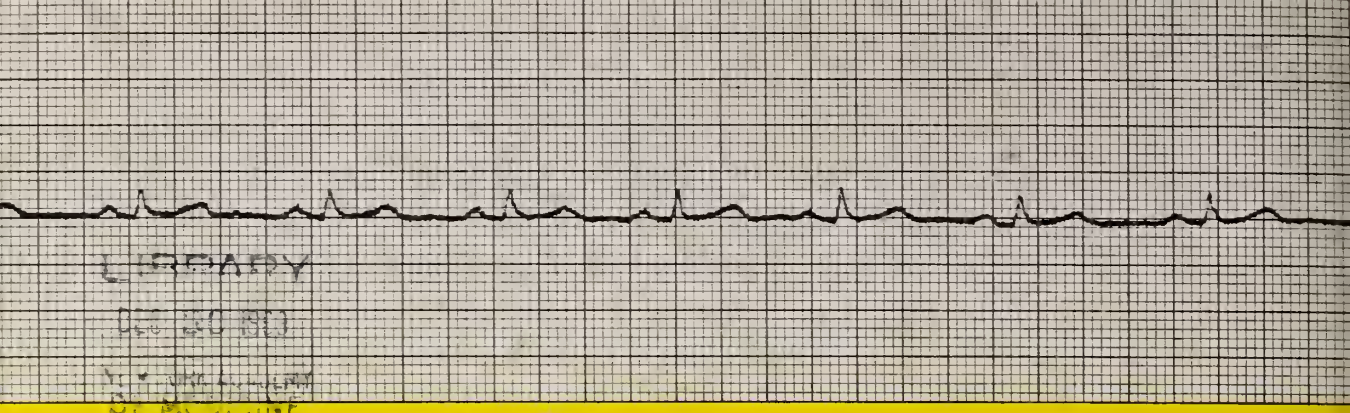
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When disease is ruled out and psychic tension is implicated

Valium® (diazepam) helps relax the patient and relieve his somatic symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms have occurred following abrupt discontinuance. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation, have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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NOT RENEWABLE AFTER 6 WEEKS

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